Catching Up?
Country Studies on Intergenerational Mobility and Children of Immigrants

OECD

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Foreword

Social mobility is a key objective for policy to foster inclusive economies and societies. How immigrants and their children, who are now accounting for almost one-in-five persons in the OECD, are faring in this respect, is particularly important for social cohesion. It is not surprising that many persons who have immigrated as adults face specific difficulties to progress, linked among others to the fact that they have been raised and educated in a different environment and education system, and that they may not have the same command of the host language as the native-born. One would, however, generally expect that for children of immigrants, especially those who are native-born, these barriers would disappear and they could enjoy the same opportunity for social mobility as their peers. Yet, evidence from previous work by the OECD and the European Union suggests that native-born children of immigrants tend to still lag behind their peers with native-born parents in many OECD countries, especially in Europe. This is particularly worrying since these are a large and growing group in most countries.

Against this backdrop, the OECD, with the support of the European Union, has provided an in-depth analysis of the links between parental disadvantage for immigrants and the outcomes of their children across EU and OECD countries, in comparison with native-born parents and their children. A first publication, *Catching Up? Intergenerational Mobility and Children of Immigrants*, published in late 2017, synthesised the results of this two-year project that was carried out by Eva Degler, Dimitris Mavridis and Almedina Music under the co-ordination of Thomas Liebig, all from the OECD's International Migration Division.

As part of this project, the OECD has commissioned a number of country background papers by leading experts. This publication presents these country studies and has been prepared with financial support of the European Union Programme for Employment and Social Innovation "EaSI" (2014-20). The opinions expressed and arguments employed herein do not necessarily reflect the official views of the OECD member countries or of the European Union.

The publication was prepared with the analytical support of Rhea Ravenna Sohst and editorial support of Liv Gudmundson, Randy Holden and Lucy Hullet. It has also benefited from comments by Laurent Aujean, Francesca Borgonovi, Jean-Christophe Dumont, Stefano Filauro and Sonia Jemmotte, as well as from inputs from other policy officers in DG-EMPL and DG-HOME.

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Executive Summary

The consequences of past immigration and integration are reflected in today's intergenerational mobility of immigrants' native-born children. This publication presents a series of country case studies. Among these OECD countries, Austria, France, Germany and the Netherlands share the experience of large-scale low-educated immigration, the so-called "guest workers", in the post-World War II economic boom period. The native-born children of these immigrants generally had relatively lower starting conditions in terms of socio-economic characteristics compared to their peers with native-born parents. In contrast, immigration to Canada has been largely high-educated, although not all immigrant groups have the same background, and intergenerational mobility patterns vary across groups. The native-born children of many Asian immigrants in Canada, for example, have a remarkably high university attendance rate that is relatively insensitive to parents' education, family income and even their own high school results.

Data from France suggest that immigrant parents frequently have high aspirations for their children, more than native-born parents in a similar situation. Yet they do not always have the capabilities or the institutional knowledge to support their children in the same way that native parents can. For example, less than 5% of children with Turkish immigrant parents receive help with homework from their mothers in France compared to over 60% of children with native-born mothers. Pre-school is of particular importance to ensure a head start, but children of immigrants are frequently underrepresented. In Austria in 2011, children whose parents were born outside of the EU were six times less likely to attend preschool than children whose parents were born in Austria. Evidence from the Netherlands also suggests that a fair share of children of immigrants "at risk" are not reached by pre-school offers.

A common finding across countries is that the education and labour market trajectories of immigrants' children are generally less determined by their parents than is the case for children of native-born parents. Because of their generally lower starting points, children of immigrants in Europe are more likely to move up from one generation to the next than the children of natives. This is particularly visible among the group with a Turkish immigrant background in Germany: Almost 50% of women and about 30% of men had no educational degree in 2012. In contrast, less than 10% of their children born in Germany had left school without any diploma. Interestingly, the share of Turkish immigrant women holding no educational degree was much higher in 2012 (49%) than in 2000 (33%).

Gender differences are highlighted in the country studies. In France, Sweden, the Netherlands and Canada, daughters of immigrants outperform sons in school – but not in Austria and the United States. The better performance of women is particularly pronounced among native-born whose parents came from the Maghreb in France, the Netherlands, and Sweden. Indeed in Sweden, there is no significant relationship between their education and that of their mothers. For sons of immigrants, however, low levels of

mothers' education seem to have a particularly negative impact on educational attainment. One explanation put forward is the potential for bias and negative stereotyping that could affect boys more than girls. In France, sons of immigrants report unfair treatment at school more often than daughters. Yet, despite the good performance of many immigrants' daughters at school, they tend to be more disadvantaged than their male counterparts when entering the labour market. Fewer daughters of immigrants are active in the labour market and more remain at home, especially after they have their first child. In the Netherlands, one-quarter of the daughters of Turkish and Moroccan immigrants stop working in a paid job after having their first child, compared with 10% of women with native Dutch parents.

Entrenched disadvantage is less common among the children of immigrants in North America. In Canada, the educational attainment of the children of immigrants exceeds that of same-aged children of native-born parents. Children of immigrants in North America have labour earnings that are either indistinguishable from those of the children of natives, with or without controlling for observable characteristics (as is the case in the United States), or higher (in Canada). In Canada, there even seems to be an earnings premium for certain groups, related to the higher educational attainment of immigrants' children and their concentration in Metropolitan areas, where earnings are higher.

In the European OECD countries considered here, labour market outcomes for the children of immigrants are more mixed. Unemployment is a particular challenge for the low-educated children of immigrants. In the Netherlands, for example, the unemployment rate among the children of Moroccan immigrants is 54% one-and-a-half years after they drop out of school – three times higher than among early school leavers with native Dutch parents.

In conclusion, the seven country chapters show that intergenerational mobility outcomes among the children of immigrants vary significantly. This holds both within and across countries, particularly along the lines of gender and parental origin countries. The good news, however, is that in all countries considered, children of low-educated immigrants on average tend to fare better than their parents.

Chapter 1. Austria: Intergenerational mobility among children of immigrants

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This chapter examines the intergenerational socio-economic mobility of immigrants' offspring in Austria, and shows how the transmission from parents to their children differs between native parents and immigrant parents. The analysis focuses on children of Yugoslav and Turkish descent, since these two groups comprise the largest set of immigrants' children in Austria. Besides offering information on the main characteristics of the Austrian immigration system and some historical and institutional information, it presents empirical findings on the educational attainment of immigrants' offspring using EU-SILC data. The Austrian preschool system is identified in view of its strong relevance in determining one's educational path, and results are presented on the role parents' education plays in deciding which education route the children are likely to take. A concluding section summarises the three strongly interlinked "dividing lines" that greatly hinder the upward mobility of the native children of immigrants, and notes a striking contrast between those of Yugoslav and Turkish descent.

Note by Turkey:
The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Main findings

- Austria has a longstanding presence of immigrants, with important influences coming from the recruitment of so-called "guest workers" during the post-War economic boom, the dissolution of the former Yugoslavia, and Austria's accession to the European Union (EU). Today the largest group of immigrants in Austria comes from Germany.
- This chapter focuses on the intergenerational transmission of educational outcomes and school-to-work transition of persons whose parents immigrated from the former Yugoslavia and Turkey.
- The results reveal important differences between the children of natives and those of Turkish and Yugoslav immigrants: Not only do those from Turkey and the former Yugoslavia achieve lower levels of education, but their children are also less likely than other groups to be upwardly mobile and achieve a higher level of education than their parents. 77% of the children of natives move upward if their parents have only compulsory education, compared to only 51% among the offspring of immigrants.
- While the sons of immigrants (both Turkish and Yugoslav) are *more* likely to obtain a higher level of education compared to their parents than natives' sons, the daughters of immigrants are *less* likely than the daughters of native-born parents to be upwardly mobile. 63% of daughters of native-born parents compared to only 46% of the daughters of immigrants obtain a higher level of education than their mothers. The greater upward mobility of immigrants' children is thus largely driven by sons. It is not entirely clear what causes this gender gap but the better accessibility for boys in entering vocational training (which represents an important opportunity to climb the social ladder), families' investment choices and gender role norms are part of the story.
- In the thirty years between 1981 and 2011, chances of attending an academic-stream education at the age of 12 decreased for pupils holding Turkish citizenship. The gap to pupils holding Austrian citizenship thereby increased from -57% to -62%.
- The probability of achieving an apprenticeship certificate is 61% for those of native descent if the highest level of their parents' education is at most compulsory schooling, compared to just 37% among the native children of immigrants. The mobility gap has narrowed across birth cohorts, but persists and remains sizeable.
- Three "dividing lines" largely account for the different mobility patterns between children of immigrants and natives' children. The first is the participation rate in preschool education. In 2011, children whose parents were born outside of the EU were six times less likely to attend preschool than children whose parents were born in Austria (13% and 79% respectively). However, the former group's participation rate has increased during the past two decades, both in absolute terms and relative to those with native-born parents.
- A second "dividing line" appears around the age of 10, when pupils (and their parents) have to decide whether they will attend a (less prestigious) lower secondary school or a (more prestigious) secondary school with an academic

focus. In 2011, students holding Turkish citizenship were 68% less likely to attend an academic secondary school than students holding Austrian citizenship. The gap for students holding a citizenship from the former Yugoslavia was 44%.

- The third "dividing line" comes around the age of 15, when pupils finish compulsory schooling and have to decide whether to join the labour force, move to vocational education, or continue with academic secondary education. The chances of joining college, which prepares students for university, were almost four times higher for Austrian students than for Turkish students in 2015/16, and still more than two times higher than for students holding a citizenship from a former Yugoslav country.

Introduction

The purpose of this chapter is to compare the intergenerational mobility of natives' and immigrants' children in Austria. The focus is on educational mobility as opposed to, say, income mobility or mobility in accessing the labour market, for two reasons. First, the data on education (and educational mobility) are not just more readily available, but also more reliable. Second, education is an excellent proxy for later income and social class, so it is perhaps the most comprehensive measure to study social mobility.

The report is structured as follows. It first provides a brief summary of an international study on intergenerational educational mobility for natives and immigrants, to furnish a helpful context for understanding mobility. The main point in this section is that in many European countries, intergenerational educational mobility is higher for the native children of immigrants than for offspring of native descent, because immigrant parents have lower levels of education and thus present a lower threshold for their descendants to pass in order to be upwardly mobile. The chapter then presents the main characteristics of the Austrian immigration system. This section also provides some historical and institutional information that is essential for a proper grasp of the empirical findings regarding immigrants and their children in Austria. The following section offers empirical findings on intergenerational educational mobility for children of immigrants and of natives. Here the focus is placed on native-born children of Yugoslav and Turkish descent, who together comprise the largest share of immigrant offspring in Austria. Another focal point of this section is the preschool system, which seems to be of strong relevance for one's educational path. It is followed be a section that looks at some results on the choice of schooling by parents' education, and notes a striking contrast between those of Yugoslav and Turkish descent. A final section summarises and concludes.

Overall context: Differences in intergenerational educational mobility for eleven European countries

How does intergenerational educational mobility differ by migration background within Europe? A recent paper studies this question for the children of native-born versus immigrant parents in eleven European countries.[1] Consistent with the existing academic literature on the topic, authors Oberdabernig and Schneebaum (2017) find that overall, the children of immigrants have *higher* rates of intergenerational mobility – in other words, this group is more likely than natives' children to have more education than their parents. (In this case, there are four classes of education – illiterate; ISCED 0-2; ISCED 3-4; and ISCED 5-6; upward mobility means that the descendant's educational class is at least one higher than the parents'.) A main finding in this chapter is that this

higher mobility of the offspring of immigrants is in very large part driven by the fact that immigrant parents have, on average, lower education than native parents. Thus, their children need to attain less education than the children of natives in order to be considered upwardly mobile.

Oberdabernig and Schneebaum (2017) show that the children of immigrants, as well as the children of natives in all countries, have a fairly high probability of achieving greater education than their parents. In the United Kingdom for example, there is a probability of over 90% that the children of at least one immigrant parent who does not have the highest educational class will be upwardly mobile (children of parents who already have the highest education class cannot be upwardly mobile, by definition). This means that more than 90% of the children of immigrants in the United Kingdom have higher education than their parents. These rates of upward mobility for immigrant offspring are also very high in France (82%), Belgium (71%), and the Czech Republic (69%). Of the 11 countries studied, the only ones in which the rates are lower than 50% are Austria, Estonia and Latvia.

The probability that children of native-born parents will have higher educational attainment than their parents is also fairly high. In France for example, 77% of natives' children achieve higher education than their parents, as do 72% of natives' children in the United Kingdom and 66% in the Czech Republic. The lowest rates of upward mobility for natives' children are in Switzerland (38%) and in Germany (40%). Thus, upward intergenerational educational mobility is fairly high, regardless of a person's migration background. In the United Kingdom, France and the Czech Republic, the rates of mobility for both groups was among the highest, while they were lowest in Austria (47% for native children of immigrants and 44% for natives' children), Germany (54% and 40%, respectively), and Luxembourg (59% and 40%, respectively). These findings raise the question: how does the mobility gap differ across countries? Do the offspring of immigrants and of natives have similar probabilities of upward mobility across countries?

In all but two of the eleven European countries analysed, the children of immigrants were more likely than the children of native-born parents to achieve a higher level of education than their parents. However, rates of upward mobility by migration background do indeed differ dramatically by country. Oberdabernig & Schneebaum (2017) calculate so-called mobility gaps, which measure the difference in the probability of immigrants' offspring having more education than their parents versus the probability of natives' children having further education than their parents. The largest of these gaps were in Switzerland, the United Kingdom, Luxembourg and Germany. Switzerland had the biggest mobility gap: there, 62% of children of immigrants were upwardly mobile, compared to 38% of natives' children. The children of immigrants are thus 24 percentage points more likely than the children of natives to be upwardly mobile. In the United Kingdom and in Luxembourg the mobility gap is also high at 19 percentage points each, while the gap is 14 percentage points in Germany. In Belgium and France, there is also a large and statistically significant mobility gap favouring immigrants' children**.** In three countries – Austria, the Czech Republic and Croatia – while the children of immigrants have higher rates of upward mobility than natives (i.e. have a positive mobility gap), this gap is not large enough to be statistically significant.

There are two countries in the study in which the children of natives were more likely to be upwardly mobile than the children of immigrants: Croatia and Latvia. Of these two countries, the mobility gap is statistically significant only in Latvia: six percentage points in favour of natives' children.

Thus for most countries, the chances that an immigrant's child will be more highly educated than the parent are high, and often greater than the probability of this being true for natives' children. An interesting aspect of Oberdabernig and Schneebaum's (2017) paper is that the authors investigate which personal- and household-level characteristics are related to the probability of upward mobility for the two groups, and which of those characteristics may be driving the mobility gap. The authors thus study how, for example, the number of siblings, the economic circumstances of the household in which one grew up, the age of the parents when the respondent was born and the age difference between the parents are related to the chances of upward mobility across countries. As mentioned above, in almost all countries, by far the most important characteristic related to the fact that immigrants' children were more likely to be upwardly mobile than natives' children is the education level of the immigrant parents being lower than the education level of the native parents. In other words, the children of immigrants had a lower threshold to surpass in order to attain more education than their parents. Details of the results for Austria are discussed below.

General characteristics of immigrants in Austria

Immigrants by countries of origin

Since immigrants in Austria are a rather heterogeneous group of people in terms of their country of origin and the reason and time that they came to Austria, this section begins with a few general features before discussing the issue of intergenerational mobility in more detail.

Austria has a long history of immigration. The first migration movement started during the 1960s and 1970s, when the economy suffered from severe labour shortages due to the booming economy. At that time, the Austrian Economic Chamber established labour recruitment centres in Turkey and the former Yugoslavia. That marked the beginning of the *Gastarbeiter* (guest worker) policy. During the first years of this period only male employees were recruited on a temporary basis. Quickly however, the project changed, introducing permanent employment contracts; family reunification ensued.

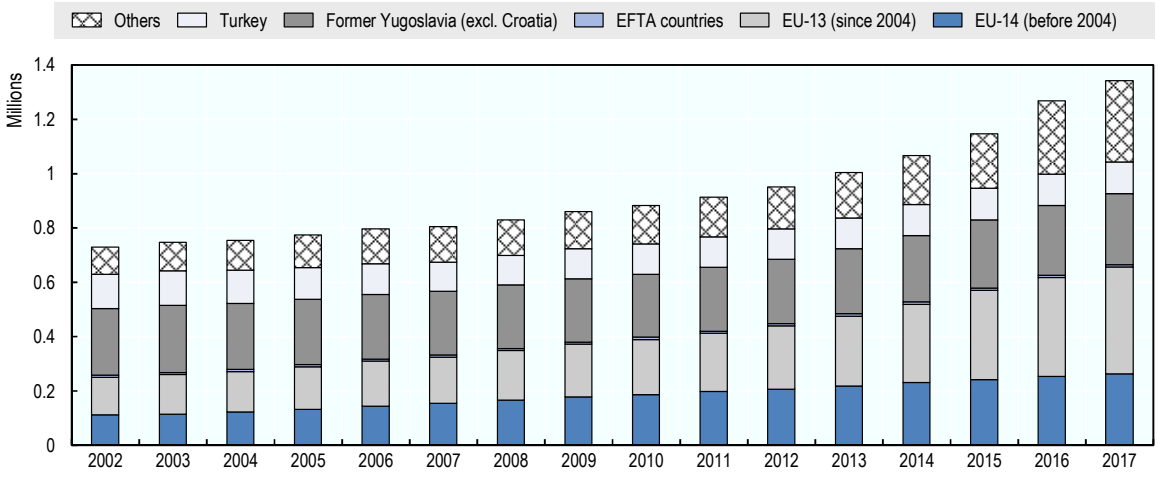
While the strong inflow of immigrants during the early 1990s was caused by civil war in the former Yugoslavia, the pattern of immigration into Austria changed considerably due to the enlargement of the European Union in 2004 and 2007.

The number of people in Austria without Austrian citizenship (foreigners) increased from 730 000 (2002) to 1 345 000 in 2017[2] (for more details see Annex Table 1.A.1). The share of foreigners thus increased from 9.1% to 15.1%. Since the focus of this chapter are immigrants, it is useful to take a closer look at the structural features of migration, beginning with the citizenship (Figure 1.1) using available data for the period 2002-17 (Statistik-Austria, 2017a).

For this period four important changes can be observed. First, the number of foreigners from the "old" EU (EU-14) increased from 15.2% to 19.6%. The largest group were Germans, numbering over 180 000 in 2017. Second, after the enlargements of the EU in 2004 and 2007, the stock of foreigners from the "new" EU increased from 140 000 to 392 000 (or from 19.1% to 29.3%).[3] Third, although in absolute terms the number of foreigners from the former Yugoslavia (excluding Croatia) and Turkey remained nearly constant (roughly at 375 000), their share of total foreigners in Austria decreased, from 50.9% to 28.2%. Hence the population of guest workers from the 1960s greatly diminished.[4] Fourth, the number of foreigners with citizenship from other countries

increased threefold, from 100 000 (2002) to 300 000 (2017). These foreigners are frequently refugees from Afghanistan, Syria, Iraq and Iran, who mainly came to Austria in 2015 and 2016.

Figure 1.1. Stock of foreigners by citizenship, Austria, 2002-17

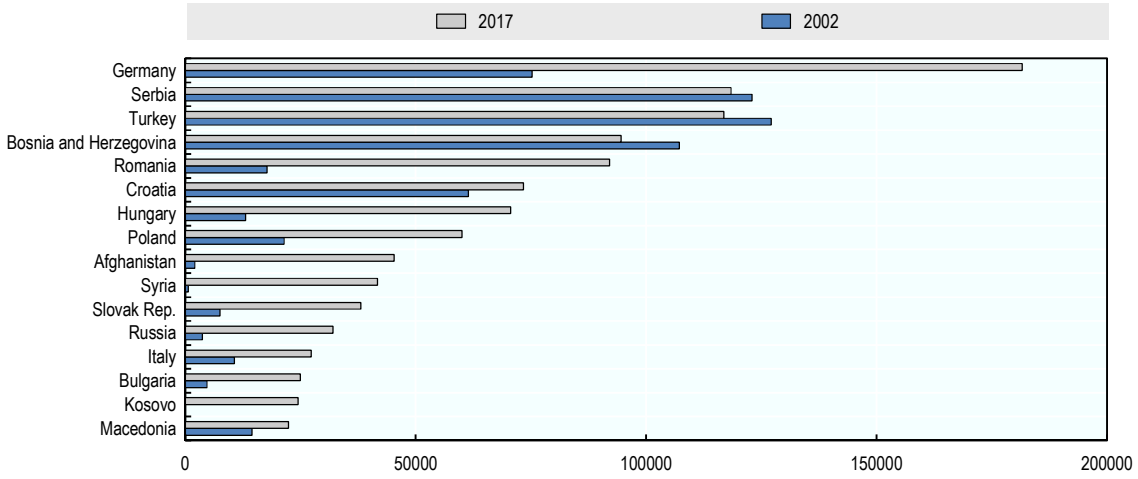


Note: The EU14 (before 2004) comprises the following 14 countries: Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom. The EU13 (since 2004) comprises the following 13 countries: Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, and Slovenia.
Source: Statistik-Austria, 2017a; authors' own calculations.

Figure 1.2 presents the numbers of foreigners for 2002 and 2017 from the 12 predominant countries of origin. The figure shows the strong increase of Germans; the stagnation of foreigners from Serbia, Turkey, Bosnia and Herzegovina, and Croatia; the strong increase of most of the new EU member countries Romania, Hungary, Poland, the Slovak Republic and Bulgaria;[5] and the strong increase of foreigners from Afghanistan and Syria.

This general division by four clusters of countries (EU-14, EU-13, the former Yugoslavia and Turkey, and "Others") is of importance, since the characteristics of these four groups of foreigners differ from each other.

Figure 1.2. Foreigners by citizenship, Austria, 2002 and 2017



Source: Statistik-Austria, 2017a; authors' own calculations.

For comparison, Table 1.1 also presents the figures for "persons with an immigration background", i.e. immigrants or native-born offspring of immigrants. Native offspring is defined as persons who were born in Austria and have parents that were both born abroad (UNECE, 2015, p. 136). The term "immigration background" pays no attention to citizenship, whether foreign or native.

Table 1.1. Population with migration background, Austria, 2008-16

	2008	2009	2010	2011	2012	2013	2014	2015	2016
	Thousands								
Total	8 210.7	8 229.3	8 245.5	8 269.2	8 302.9	8 350.2	8 415.1	8 491.0	8 599.2
Without immigration background	6 784.3	6 769.9	6 717.3	6 721.2	6 739.8	6 727.8	6 700.5	6 678.1	6 701.1
With immigration background	1 426.4	1 459.4	1 528.2	1 548.0	1 563.0	1 622.4	1 714.6	1 812.9	1 898.0
Immigrants	1 063.1	1 072.9	1 123.9	1 132.0	1 151.2	1 192.8	1 254.4	1 334.3	1 414.9
Native offspring of immigrants	363.3	386.5	404.4	416.0	411.9	429.5	460.2	478.7	483.1
	Percentages								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Without immigration background	82.6	82.3	81.5	81.3	81.2	80.6	79.6	78.6	77.9
With immigration background	17.4	17.7	18.5	18.7	18.8	19.4	20.4	21.4	22.1
Immigrants	74.5	73.5	73.5	73.1	73.6	73.5	73.2	73.6	74.5
Native offspring of immigrants	25.5	26.5	26.5	26.9	26.4	26.5	26.8	26.4	25.5

Note: "Immigration background" refers to both immigrants and the native-born offspring of immigrants.
Source: Statistik-Austria, 2016a.

While the share of persons with an immigration background in 2016 was 22.1%, the share of persons with foreign citizenship was just 14.6% (see Annex Table 1.A.1). This difference is due to the naturalisation of persons with an immigration background. Further, it can be seen that in 2016, three-quarters of people with an immigration background were born abroad (immigrants) while only one-quarter were themselves born in Austria. Since the subject here is intergenerational mobility, the chapter will focus in

particular on persons who were born and raised in Austria, as these people theoretically had the same access to education as those with native-born parents.

The composition of the children of immigrants in terms of country of origin is displayed in Table 1.2. It can be seen that only one-quarter of people with an immigration background were born in Austria. However, these shares differ a great deal by countries of origin. High shares of immigrants' offspring show up in families from the former Yugoslavia (30.0%) and in particular from Turkey (43.2%). In contrast, a very low share of immigrants' offspring is from the EU-14.

Table 1.2. Countries of origin of the population with a migration background, Austria, 2015

	Total	Immigrants	Children of immigrants	Children of immigrants (% of total)	Children of immigrants by regions
With immigration background	1 813	1 334	479	26.4%	100.0%
EU-14, Switzerland, Norway	253	223	30	11.9%	6.3%
EU-Enlargement 2004	251	197	54	21.5%	11.3%
EU-Enlargement 2007	198	149	49	24.7%	10.2%
Former Yugoslavia	513	359	154	30.0%	32.2%
Turkey	273	155	118	43.2%	24.6%
Others	324	250	74	22.8%	15.4%

Note: Immigration background means that both parents have been born abroad. Roughly 40% of these people do have already Austrian citizenship (see Statistik Austria 2016b, p.22).
Source: Statistik-Austria, 2016a, p. 27.

To study the patterns of intergenerational mobility of immigrants more closely, the focus needs to be on older cohorts. Such older cohorts can be found only in *Gastarbeiter* families, who migrated during the 1960s and 1970s. Hence the following part of the chapter centres mainly on the children of immigrants from the former Yugoslavia and Turkey. They account for 32.2% and 24.6% of all children of immigrants, respectively.[6]

Migrants by level of education

Table 1.3 presents the level of education for immigrants and their native-born offspring in comparison to natives. Of all adults, 23.6% (1.12 million people) have a migration background, and of that group, only 9.6% (107 000 people) were born in Austria with two foreign-born parents. Persons who immigrated themselves are far more numerous than the native-born offspring of immigrants.

As established earlier, the chapter distinguishes between four different levels of education. Although on average the level of education is very similar between natives and immigrants, there are considerable differences across immigrant sub-groups. People with an immigration background from the former Yugoslavia and in particular from Turkey have strikingly low levels of education. In contrast, immigrants from the EU-14 exhibit rather high levels and have a remarkably large share of people with tertiary education.

The comparison of immigrants and their native Austrian offspring by level of education is surprising, in that the latter group has a slightly lower level of education. One explanation

for that unexpected pattern may be that a large share of immigrants – mainly from the EU-14 – has tertiary qualification. Further, the offspring of immigrants have much higher shares of ISCED 3-education, an indicator that they have good access to apprenticeship training.

Table 1.3. Level of education for native-born adults, immigrants, and the native-born offspring of immigrants, aged 15 to 65, 2015

	Numbers (thousands)	ISCED 0-2 (percentages)	ISCED 3 (percentages)	ISCED 3-4 (percentages)	ISCED 5-6 (percentages)	Average level of ISCED education
Total population	4 747	14.4	52.2	15.9	17.5	2.37
Without immigration background	3 628	10.8	57.4	15.2	16.6	2.38
With immigration background (immigrants + native offspring)	1 119	26.0	35.5	18.2	20.3	2.33
Immigrants	1 012	26.9	33.7	18.5	20.9	2.33
Immigrants' offspring	107	18.2	51.7	15.3	14.9	2.27

Source: Statistik-Austria, 2016b, p. 51.
Note: Immigration background means that both parents have been born abroad. Roughly 40% of these people do have already Austrian citizenship (see Statistik Austria 2016b, p.22).

Table 1.4 takes a closer look at the different types of schools chosen by pupils with foreign citizenship. There is no information on the country of birth here, so only citizenship is considered in this section. The table distinguishes between nine different types of schools. Primary school takes four years and starts at age six (*Volksschule*); lower secondary school takes equally four years and follows at the age of ten. A number of different schools are available for lower secondary school but the most important distinction is between the academically oriented college (*AHS Unterstufe*) and the less prestigious schools including basic secondary schools (*Hauptschule*) and the new secondary school (*Neue Mittelschule)*. Following a recent educational reform, all lower secondary schools (*Hauptschule*) will shortly be transformed into new secondary schools (*Neue Mittelschule*). Special schools (*Sonderschulen*) are for disadvantaged pupils, while polytechnic education lasts for just one year and follows lower secondary education at the age of 14. This is the ninth mandatory school year and is attended in particular by those pupils who will continue with an apprenticeship. The three vocational schools listed (to the right of colleges) begin at the age of 15. However, only the vocational college is equal to a university-geared education. Importantly, only completion of the academic secondary school or the vocational college qualifies students to study at university. The rates of attendance at these schools differ dramatically by migration background, as well as by the country of origin for students with a migration background.

Table 1.4 reveals a first "dividing line" in the Austrian educational system which occurs around the age of 10. Compared to students holding Austrian citizenship, pupils with citizenship from the former Yugoslavia and Turkey have comparatively high enrolment rates at the less prestigious secondary schools, namely the new secondary school (*Neue Mittelschule*), and much lower enrolment rates at the academically-oriented college (*AHS Unterstufe*). Furthermore, their rates of enrolment in special needs schools (*Sonderschule*) are high. The second "dividing line" appears around the age of 15 when students choose whether to pursue upper secondary school in college that prepares them for university (*AHS Oberstufe*), or to enrol in a polytechnic school. Table 1.4 shows that the share of students with a Turkish or former Yugoslav citizenship enrolling in polytechnic school is

two times higher than that of students with Austrian citizenship. Once students have chosen to attend a polytechnic school, and thus to pursue an apprenticeship education, it is nearly impossible to later get a qualification that would allow them to enter university. As can clearly be seen, both dividing lines separate pupils from the former Yugoslavia and Turkey from native pupils in terms of educational path.

Table 1.4. Pupils/students by citizenship, gender and types of school, aged six to 18, 2015/16

	Primary school	Basic secondary (*Hauptschule*)	New secondary school (*Neue Mittelschule*)	Special needs school	Polytechnic	College (lower and upper academic secondary school)	Vocational school I	Vocational school II	Vocational college
Males, percentages									
Austria	29.2	2.6	16.2	1.5	1.7	17.3	14.2	4.6	12.7
Turkey	34.7	2.6	25.0	3.6	3.3	4.8	13.9	5.1	6.9
Former Yugoslavia	34.3	2.6	22.5	3.7	3.2	7.8	12.9	4.5	8.5
Slovak Republic	47.3	2.7	17.7	2.2	2.0	13.1	6.1	2.1	6.8
Hungary	42.5	2.0	22.1	1.4	1.8	13.7	6.2	2.8	7.5
Czech Republic	37.4	3.9	13.4	1.5	1.4	15.6	5.3	8.7	12.8
Poland	41.3	2.1	16.4	1.2	1.7	17.1	7.3	4.3	8.5
Italy	32.7	1.1	12.3	0.7	0.9	24.5	15.4	3.6	8.6
United States	27.8	1.7	18.6	2.1	2.2	25.1	10.7	3.9	7.9
Germany	30.3	1.7	12.1	2.1	1.2	25.4	13.4	4.6	9.1
Females, percentages									
Austria	29.6	2.7	15.7	0.8	1.0	22.1	7.8	5.0	15.3
Turkey	34.6	2.6	25.4	2.7	2.6	9.1	7.5	6.8	8.7
Former Yugoslavia	32.5	2.5	22.0	2.4	2.4	12.1	8.1	6.2	11.9
Slovak Republic	41.7	3.3	16.3	1.0	1.7	19.0	3.8	5.2	7.9
Hungary	41.1	2.2	19.2	0.8	1.5	16.1	4.3	3.8	11.0
Czech Republic	32.2	2.1	10.7	0.9	0.9	16.2	2.3	12.9	22.0
Poland	43.1	1.4	13.1	0.6	0.8	23.4	4.2	3.9	9.3
Italy	33.0	1.2	13.4	0.8	1.2	28.6	7.2	3.3	11.3
United States	27.6	2.3	16.9	1.0	1.5	28.9	6.1	6.4	9.3
Germany	31.1	1.9	10.9	1.1	0.9	28.8	9.8	5.1	10.3

Source: Statistik-Austria, 2017b; authors' own calculations.

However, there is one striking difference having to do with gender. While females from all countries of origin have higher enrolment rates for colleges than males do, males attend vocational schools at much higher rates than females. These patterns also result in higher education entrance qualification for females than for males which is not shown here.[7] With the exception of Poland, all pupils from the new EU member countries are

(far) below the level of those of native descent. Only Italy, Germany and the United States have higher levels of college attendance rates than natives.

Intergenerational mobility among the children of immigrants in Austria

Strong differences between those of native and foreign descent

The following section specifically addresses educational mobility by migration background. As mentioned in the introduction, there are two reasons for placing the focus there rather than on mobility in other outcome measures. First, the available data concerning intergenerational issues are much more reliable for education than for income. Second, the level of education is on average a good predictor of upcoming job prospects as well as prospective income.

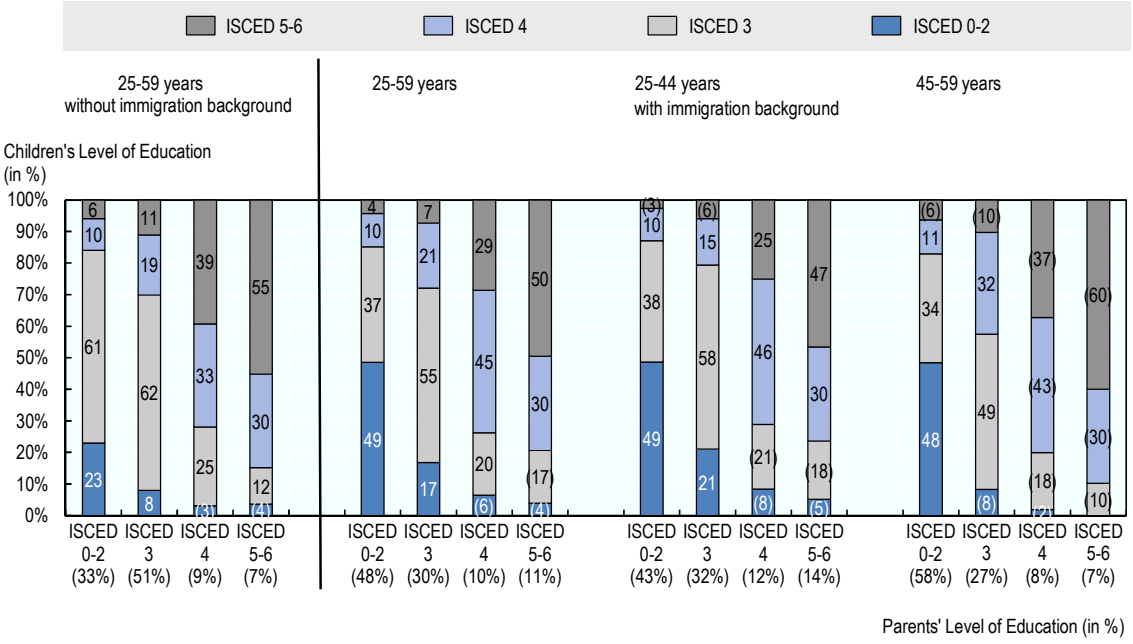
To analyse the transmission of education, the chapter utilises 2011 data from the European Union Statistics on Income and Living Conditions (EU-SILC) for Austria; the "special module" of the EU-SILC data concentrated on the issue of intergenerational mobility.[8] All adults between the ages of 25 and 59 were asked about the highest level of education of their parents as well as about their own level, along with several other questions relating to important background variables.[9] These data enable the study of the transmission of educational attainment between parents and their children by different characteristics. In particular, they distinguish between persons with and without an immigration background. Although the module does not differentiate between immigrants and the offspring of immigrants due to data constraints, separate calculations can be made by the age of immigrants. For simplicity, the sample is divided into two age groups, 24-44 and 45-59. While the former group was born between 1967 and 1986, the latter was born between 1952 and 1966. Since the *Gastarbeiter* cohort migrated during the 1960s and 1970s, those in the older group (45-59 years) are nearly all persons who actually migrated themselves. In contrast, those who were born between 1967 and 1986 are to a large extent the children of immigrants. Hence the distinction by age may provide a rough proxy for immigrants and the native children of immigrants.

Figure 1.3 presents the pattern of intergenerational mobility by natives and immigrants for three different age groups. Comparing only the left two blocks, i.e. persons with and without an immigration background aged 25-59, it can be seen that the level of parental education is in general low. However, the older age of these parents should be kept in mind.[10] The share of parents with no more than a compulsory education was 33% and 48% for respondents without and with an immigration background, respectively.[11] In contrast, the share of parents with apprenticeship education was 51% for natives and 30% for people with an immigration background. This important structural difference should be kept in mind in further considering the educational mobility of the two populations.

A rather low intergenerational mobility can be seen for both groups of people. On average (not shown here), the probability of receiving a university degree if one's parents have only compulsory schooling is a mere 6%. In contrast, if at least one of the parents has a university degree, the probability of their children also receiving a university degree is 54%. As can be seen in Figure 1.3, these characteristics are similar for both natives and immigrants. However, strong differences in mobility between these two groups appear when it comes to ISCED 3, under which apprenticeship and intermediate technical and vocational school are subsumed. The probability of achieving an apprenticeship certificate for natives is 61% if the highest level of parents' education is compulsory schooling (ISCED 0-2), and 62% if parents have an apprenticeship certificate themselves.

The comparable figures for people with immigration background are just 37% and 55%, respectively. Since the highest level of education for roughly 80% of both native and immigrant parents is either ISCED 0-2 or ISCED 3, these "educational gaps" are decisive for the disparate educational careers of natives' and immigrants' children.

Figure 1.3. Intergenerational educational mobility by age and immigration background, Austria, 2011



Note: Immigration background refers to immigrants and the native-born offspring with two foreign-born parents. If a subsample has 20 or less observations, the percentage is reported in parentheses.
Source: Altzinger et al., 2013, p. 59.

Comparing further the mobility patterns of people with an immigration background by different age cohorts (24-44 and 45-59 years old), it can be seen that this gap declines for the younger cohort, although it remains high in comparison with natives' children's mobility. In particular, the diverging probability of moving upward if the parents have only compulsory education is remarkable. While for the children of natives this probability is 77%, it is only 51% for the children of immigrants. Moreover, this pattern did not change between the older and the younger cohorts. Hence if policy makers wish to enhance the integration of the children of immigrants, it is important to improve their access to apprenticeship training.

Finally, a look at the upper end of the educational ladder shows that these features depend strongly on parents' education. Here too we can find strong differences between natives and the children of immigrants. If the parents' highest education is academic secondary education, the probability that their children achieve tertiary education is 39% for native's children but only 25% for those of immigrants. The difference is similar if parents' highest education is tertiary education (55% and 50%, respectively). Interestingly, people with an immigration background are more likely to have parents with tertiary education than natives are (11% and 7%, respectively). Moreover, for people with an immigration background, this share increased for the younger cohort. Generally, these patterns reflect

the strong heterogeneity of immigrants and the strong and recent influx of immigrants from the EU-14, in particular from Germany and Italy. However, parents from the former Yugoslavia and Turkey rarely have tertiary education.

Intergenerational mobility by socio-economic characteristics

The study by Oberdabernig and Schneebaum (2017) takes a closer look at the socio-demographic characteristics of the sample of natives, immigrants, and their children; in doing so it considers how these characteristics may be related to the chances of mobility for each group, and how they might be related to the mobility gap across groups. It will be helpful to keep in mind that the data analysed in this chapter also come from the 2011 sample of the EU-SILC survey data. The population of immigrants and their children may have changed in the six years since those data were collected.

Above it was shown that across the 11 countries analysed in Oberdabernig and Schneebaum (2017), the children of immigrants have higher rates of upward intergenerational educational mobility than natives in almost all countries, including Austria. However, of the countries in which that group is more likely to be upwardly mobile, the gap in mobility rates between immigrants' offspring and natives' offspring is the lowest in Austria. Indeed, while the children of immigrants are 2.7 percentage points more likely than native descendants to be upwardly mobile, this difference is not statistically significant in Austria. Nonetheless, it is possible to analyse the drivers behind the gap.

In particular, it can be asked which characteristics impact the difference in the probability of upward mobility for the children of immigrants versus that for persons of native descent. As discussed above, the most important factor driving the difference in Austria is the education of the parents. On a scale of 0-3, with zero being illiterate (basically no one in the Austrian sample has this outcome), 1 being attainment of lower secondary schooling (ISCED 0-2), 2 being upper secondary school (ISCED 3-4),[12] and 3 being tertiary schooling (ISCED 5-6), the average highest education level among native parents is 1.6, while it is 1.5 for immigrants.[13] The "highest education level" is the education of the more highly educated parent in a couple, usually the father. This seemingly small difference in the average education of the native and migrant parents actually has a large positive impact on the mobility gap between the two sets of offspring.

Along with the overall level of the parents' education, one can see differences in the education level of each parent, separately. Again using the sample only of those parents without the highest educational class, the native fathers have an average education level of 1.6, while immigrant fathers have an education level of 1.3. Immigrant mothers are also less educated than their native counterparts: their education level is 1.2, while the level is 1.4 for native mothers. That migrant parents are less educated than native parents becomes especially clear when comparing the immigrant and native mothers and fathers separately. Overall, this lower education level means that the children of immigrants have a lower threshold to pass in order to be upwardly mobile, which drives their higher rates of upward mobility.

A number of other background characteristics also play a role, however. After parental education levels, the next most important characteristic is the age of the mother when she gave birth. On average, the immigrant mothers were almost a year older than the native mothers when they gave birth, and this difference corresponds to the higher probability that the immigrant mothers' offspring will be upwardly mobile. The next most important background characteristic in the mobility gap is the difference in the reported financial

situation when the respondent was 14 years old. Interestingly, in this sample for Austria, the children of immigrants reported having a better financial situation at home when they were 14 than native descendants did. On a scale of 1 ("very bad") to 6 ("very good"), the average response for the offspring of immigrants was 3.72, while it was only 3.63 for natives. This seemingly small difference is the third-most important fact explaining the higher intergenerational mobility of the children of immigrants.

It is interesting to look at the final distribution of educational attainment for the offspring of natives and of immigrants, knowing that the latter are more likely to be upwardly mobile than the former, and that that difference is driven mostly by the fact that immigrant parents have less education than native parents. Recall that both immigrant parents and their descendants have lower average levels of education compared to natives of the same generation. More worrisome, though, is the fact that relatively more children of immigrants than natives' children get "stuck" in lower education classes. Of parents with education at the ISCED 0-2 level, a greater share of natives' descendants (80%) are able to move up and out of that education class, while less than two-thirds (64%) of immigrants' children are upwardly mobile. The latter are somewhat more likely than their peers without an immigration background to move from ISCED 3-4 to the highest education class, and overall, a greater share of them is upwardly mobile. However, these results once again strongly emphasise that the children of immigrants appear in particular to "get stuck" in the lowest education class (Oberdabernig and Schneebaum, 2017).

There are several possible causes for this problematic finding. For one thing, if they do not speak the national language (German) at home, the children of immigrants are likely to be at a strong disadvantage in school. Indeed, research on test scores for them and for those of native descent in 40 countries shows that speaking the national language at home is one of the biggest predictors of success on standardised tests (Schneeweis, 2011). Secondly, there could be an element of teacher bias or discrimination against immigrants' offspring. Especially in Austria, where there are two points of streaming students onto a vocational or academic track – a decision in which the teacher plays a large role – any bias or prejudice against the abilities of these pupils could hurt them. Literature for Germany shows that that may happen there (Lüdemann and Schwerdt, 2013); it could happen in Austria as well.

One final element of the differences in upward mobility for the children of native-born and immigrant persons in Austria has appeared in the academic literature – namely, the role of the descendants' gender. Indeed, Schneebaum, Rumplmaier and Altzinger (2016) show that analysing intergenerational educational mobility by gender of the descendants makes a tremendous difference in the overall mobility patterns discussed above. While the sons of immigrants are more likely to obtain more education than their parents than natives' sons are, the daughters of immigrants are *less* likely than the daughters of native-born parents to be upwardly mobile. Table 1.5 shows the exact figures: 49% of sons of native-born parents had more education than their fathers and 68% had more education than their mothers; 51% of sons of immigrants had more education than their fathers and 77% had more education than their mothers. The opposite pattern is true for daughters: 48% of daughters of native-born parents are more highly educated than their fathers while 63% have more education than their mothers. Of the daughters of immigrants, though, only 35% obtain more education than their fathers and 46% obtain more education than their mothers.

Table 1.5. Directions of educational class mobility by gender, Austria

	Upwardly mobile (%)	Downwardly mobile (%)	Not mobile (%)
Native parents:			
Father-son	49.2	8.6	42.4
Mother-son	67.5	4.0	28.6
Father-daughter	47.7	7.7	44.6
Mother-daughter	63.2	3.5	33.3
Immigrant parents, native-born children:			
Father-son	50.7	18.6	30.7
Mother-son	76.7	3.5	19.8
Father-daughter	34.6	3.9	61.5
Mother-daughter	45.8	8.0	46.2

Source: Adapted from Schneebaum, Rumplmaier and Altzinger, 2016.
Note: Educational levels are captured in three ISCED groups: 0-2, 3-4 and 5-6.

Thus, the apparent advantage that the children of immigrants have in the chances of surpassing their parents' educational attainment is specific to boys. It is not clear exactly why this is the case, but one possible element of the story is that immigrant families may be more resource-constrained, meaning that they can invest in the education of fewer of their children (Schneebaum, Rumplmaier and Altzinger, 2016). These families may also have more traditional gender role norms and expectations, meaning that they may expect their sons to be financial providers – making the sons' education more important or financially valuable than the daughters'. Another element of the story could be that it is primarily males in the families with a migration background who have access to Austria's system of vocational training (Schneebaum, Rumplmaier and Altzinger, 2016). As many of the jobs in these training programmes are typically male-dominated, social norms dictate that females have more difficulty accessing many of the apprenticeship programmes. However, given the data used in this study, it is impossible to know why exactly the daughters of immigrants do not achieve the same upward mobility as their brothers.

Pre-school attendance and intergenerational mobility

Since one's educational career starts well before the first day of school, the discussion now turns to preschool education in Austria. Unfortunately, data on this important issue are sparse. Official data show that the participation rates of children below the age of six at kindergarten are very similar between native and children with foreign citizenship. However, no participation rates for children by countries of origin are available. Hence, the interpretation of these data should be handled with care. At least two stylised facts can be identified. First, the share of children who need language guidance differs strongly between those who speak German in daily life and those who use another language. While this share is 10% for children whose colloquial language is German, it is 58% for the children whose colloquial language is not German. Secondly, children who do not attend kindergarten have higher needs for supplementary language programmes (16% of children who speak German in their daily life and 80% of children who speak a language other than German in their daily life) (Statistik-Austria, 2016b, p. 44).

Such strong differences concerning the different levels of language fluency require further research. The possibilities for learning German may be insufficient either at home (inside the family) or at the kindergarten – or, probably, in both places. While the former

depends on the parents' language proficiency, the latter depends on the quality and endowments of the kindergartens. Both variables certainly differ strongly by the social and economic standards of households, and are strikingly heterogeneous. To get a better grasp of this issue, it helps to look again at the EU-SILC data from 2011.

The EU-SILC sample covers 4 097 000 people between the ages 25-59 in Austria. The total population consists of 79% natives and 21% people with an immigration background, here defined as having two parents born outside of the EU. The definition does not distinguish between Austrian-born and EU-15-born children of immigrants. Within the latter, three cases are distinguished: first, the case of respondents who were themselves born in Austria or another EU-15 country and whose parents were born outside of Austria but in the EU-15 (13% of all people with an immigration background); second, the case where only the respondents were born in Austria or another EU-15 country but both parents were born outside the EU-15 (9%); and finally, the third and by far largest case, in which both the respondents and the parents were born outside the EU-15 (78%). The data further distinguish between two age cohorts (25-44 and 45-59 years old). The results are presented in Table 1.6.

In 2001 the preschool attendance rate for the total population was only 56%. However, this rate is strikingly different for natives' children (60%) and the children of immigrants (43%). A distinction within the group of people with an immigration background displays dramatic differences. The group of families in which both the parents and the children were born outside of the EU-15 shows by far the lowest preschool attendance rates (36%). This comes as no surprise since these people were all born abroad. If the respondents were born in the EU-15 (mainly in Austria), the attendance rate increases to 59%. Moreover, if additionally one parent was born in the EU-15, the attendance rate increases further up to 76%.

Comparing the two different age groups, the results illustrate the strong increase in attendance rates of the younger cohort. However, the increase was much stronger for natives (from 41% to 78%) than for respondents with an immigration background (from 32% to 50%).[14] Once again it must be kept in mind that the largest share of these people by far were born abroad and thus could not join the Austrian preschool system. But looking at the development of children born in the EU-15 whose parents were not born in EU-15, it is clear that the improvement for natives has been much greater. Only respondents with an immigration background in which at least one parent was born in the EU-15 show higher attendance rates than natives.

Concerning policy implications, it can be concluded that at least for the generation captured in this sample (respondents born between 1952 and 1986) the preschool attendance rate is generally much lower for people with an immigration background than for natives. The lower rate of kindergarten attendance is especially alarming for children with an immigration background, who would benefit most from the training they would receive there.

Table 1.6. Preschool attendance rates by age and immigration background, persons aged 25-59, Austria, 2011

Immigration background	Total (thousands)	Total (%)	Preschool attendance rate (%)
Total	4 097	100	56
25-59 years			
No immigration background	3 217	79	60
Immigration background (total)	880	21	43
Children and (at least) one parent born in EU-15	118	13	76
Children born in EU-15; parents not born in EU-15	76	9	59
Neither children nor parents born in EU-15	686	78	36
25-44 years			
No immigration background	1 656	75	78
Immigration background (total)	559	25	50
Children and (at least) one parent born in EU-15	72	13	87
Children born in EU-15; parents not born in EU-15	54	10	64
Neither children nor parents born in EU-15	432	77	42
45-59 years			
No immigration background	1 561	83	41
Immigration background (total)	321	17	32
Children and (at least) one parent born in EU-15	46	14	57
Children born in EU-15; parents not born in EU-15	22	7	46
Neither children nor parents born in EU-15	253	79	26

Source: Altzinger et al., 2013, p. 60.
Note: "Immigration background" indicates that both parents were born outside of Austria. EU-15: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom. Children born in Austria with immigrant parents (regardless of EU or non-EU origin) are considered to be born in EU-15.

Choice of schooling by parents' education

Finally, results are presented here from a recent study of the impact of parents on the choice of schooling for the years 1981 and 2011 (Statistik-Austria, 2015).

As pointed out above, there are three distinct moments that impact educational careers in Austria: pre-school education; the separation between lower and higher secondary education at the age of 10; and the separation between either joining apprenticeship training or pursuing academic education at age 15. The focus here is on the second and the third decisions.

Table 1.7 presents the probabilities of 12-year-old pupils attending the academic educational stream, compared to a reference person who is male, has Austrian citizenship, goes to school in Vienna, and has parents with a university degree (ISCED 5-6). For this comparison, the authors have calculated odds ratios, which give the odds of joining the academic schooling stream through various demographic characteristics, holding all other characteristics constant – including the parents' level of education. In this case, the probability of females joining an academic stream education instead of a lower secondary education (*Hauptschule*) in 1981 in Austria was 6% lower than for males. However, this difference changes markedly in favour of females 30 years later. In 2011, the odds for a female entering the academic stream instead of a lower secondary education were 30% higher than for males.

Table 1.7. Odds ratios of attending the academic secondary stream for 12-year-old pupils, Austria, 1981 and 2011

	Estimate	Std. error	Sig.	Odds ratio	Estimate	Std. error	Sig.	Odds ratio
	1981				2011			
(Intercept)	2.12	0.04	***	8.31	1.38	0.03	***	3.98
	Gender (reference: male)							
Female	-0.06	0.02	***	0.94	0.27	0.02	***	1.30
	Citizenship of father (reference: Austria)							
EU-14	0.32	0.1	***	1.38	-0.07	0.05		0.93
Former Yugoslavia	-0.88	0.13	***	0.42	-0.41	0.04	***	0.66
Turkey	-0.85	0.17	***	0.43	-0.96	0.08	***	0.38
Others	-0.49	0.14	***	0.62	-0.61	0.05	***	0.54
	Size of community (reference: Vienna)							
0-4 999	-1.44	0.02	***	0.24	-1.41	0.02	***	0.24
5 000-19 999	-0.95	0.03	***	0.39	-0.92	0.02	***	0.40
20 000-99 999	-0.42	0.03	***	0.66	-0.48	0.03	***	0.62
100 000-999 999	-0.29	0.03	***	0.75	-0.17	0.03	***	0.84
	Highest educational level of a parent (reference: ISCED 5-6)							
ISCED 0-2	-3.7	0.04	***	0.02	-2.56	0.03	***	0.08
ISCED 3	-2.63	0.04	***	0.07	-1.99	0.02	***	0.14
ISCED 4	-0.85	0.04	***	0.43	-0.78	0.02	***	0.46

Note: The reference category is 1 in the odds ratio. Odds ratios below 1 therefore correspond to a lower probability and odds ratios above 1 to a higher probability than the reference group. Note that the reference group of pupils is male, has a father who holds Austrian citizenship, is located in Vienna and has a father with a university degree (ISCED 5-6).
Interpretation: In 1981, 12-year-old pupils in Austria holding an EU-14 citizenship were 38% more likely than pupils holding Austrian citizenship to enter the academic educational stream, all other socio-demographic characteristics held constant.
Source: Statistik-Austria, 2015, p. 5.

For the issue of intergenerational mobility, it is interesting to look more closely at students from the former Yugoslavia and Turkey, who are studied separately in this study. For pupils holding citizenship from those two countries we can see that in 1981 their chances of joining an academic stream education at the age of 12 were much lower than that for natives (-58% and -57%, respectively). However, comparing the results for 2011, it can be seen that pupils with citizenship from the former Yugoslavian made considerable progress, but are still far below the reference group (-34%). What is truly alarming however is the increasing gap (from -57% to -62%) for pupils with Turkish citizenship.

It can also be seen that the chances of attending the academic stream in school at the age of 12 are close to impossible if the highest level of parent's education is below ISCED 4 – that is, if parents have neither a "Matura" (academic stream background) nor a tertiary education. These results strongly accord with Altzinger et al., 2013, who also emphasise that upward mobility is very low if parents' highest level of education is only ISCED 0-2 or ISCED 3.

It is further possible to compare the odds of a 17-year-old attending college. Table 1.8 shows that girls' chances of obtaining higher education improved during the period 1981 and 2011. Interestingly, the odds of pupils with citizenship from the former Yugoslavia

deteriorated over this period, from 0.81 to 0.46. For pupils with Turkish citizenship, the odds remained relatively stable on a very low level (0.49 in 1981 and 0.53 in 2011).

These data show that access to higher levels of education is particularly difficult for the children of both of these groups of immigrants and – more importantly – that their chances have not improved much over the past three decades. However, this pattern can be interpreted only jointly with the observation that the parents' highest level of education is a key determinant in children's access to a college education. If the highest level of parent's education is only ISCED 0-3, the chances of getting a college education are practically non-existent (see Table 1.8). Since parents from the former Yugoslavia and Turkey have rather low levels of education, the upward mobility for their children is hampered in particular.

Table 1.8. Odds ratios of college attendance for 17-year-old pupils, Austria, 1981 and 2011

	Estimate	Std. error	Sig.	Odds ratio	Estimate	Std. error	Sig.	Odds ratio
	1981				2011			
(Intercept)	0.93	0.04	***	2.54	0.43	0.03	***	1.54
	Gender (reference: male)							
Female	0.26	0.02	***	1.3	0.56	0.02	***	1.76
	Citizenship of father (reference: Austria)							
EU-14	0.5	0.11	***	1.65	0.25	0.06	***	1.28
Former Yugoslavia	-0.21	0.14		0.81	-0.77	0.06	***	0.46
Turkey	-0.72	0.19	***	0.49	-0.64	0.1	***	0.53
Others	0.29	0.15	*	1.34	-0.2	0.06	***	0.82
	Size of community (reference: Vienna)							
0-4 999	-0.61	0.03	***	0.55	-0.95	0.03	***	0.39
5 000-19 999	-0.37	0.03	***	0.69	-0.67	0.03	***	0.51
20 000-99 999	-0.12	0.03	***	0.88	-0.52	0.04	***	0.6
100 000-999 999	0.23	0.03	***	1.25	0.03	0.04		1.03
	Highest educational level of a parent (reference: ISCED 5-6)							
ISCED 0-2	-3.51	0.04	***	0.03	-2.61	0.04	***	0.07
ISCED 3	-2.63	0.04	***	0.07	-2.16	0.02	***	0.12
ISCED 4	-0.97	0.04	***	0.38	-0.99	0.03	***	0.37

Source: Statistik-Austria, 2015, p. 5f.

Lastly, looking at the different odds of people attending an apprenticeship at the age of 17, we can see several complementary patterns (Table 1.9). First of all, the odds ratio for females was 0.33 in 1981 and has not changed that much through to 2011 (0.39). That result indicates that apprenticeship is strongly dominated by males. Since this kind of dual education system is in general very successful in preventing youth unemployment, it should be encouraged first for females and second for disadvantaged people such as youths from the former Yugoslavia and Turkey. For these two groups of people, the odds ratios improved strongly (from 0.38 to 0.83 for the former and from 0.08 to 0.81 for the latter) but still remain below the attendance probability of natives. Finally, the probability of attending an apprenticeship increases dramatically if parent's education is rather low.

Table 1.9. Odds ratios of apprenticeship attendance for 17-year old pupils, Austria, 1981 and 2011

	Estimate	Std. error	Sig.	Odds ratio	Estimate	Std. error	Sig.	Odds ratio
	1981				2011			
(Intercept)	-2.47	0.07	***	0.08	-2.39	0.04	***	0.09
	Gender (reference: male)							
Female	-1.10	0.01	***	0.33	-0.94	0.02	***	0.39
	Citizenship of father (reference: Austria)							
EU-14	-0.43	0.10	***	0.65	-0.14	0.06	*	0.87
Former Yugoslavia	-0.96	0.09	***	0.38	-0.19	0.04	***	0.83
Turkey	-2.54	0.13	***	0.08	-0.22	0.06	***	0.81
Others	-0.44	0.14	**	0.64	-0.72	0.06	***	0.49
	Size of community (reference: Vienna)							
0-4 999	0.12	0.02	***	1.13	0.61	0.02	***	1.84
5 000-19 999	0.06	0.02	**	1.07	0.44	0.03	***	1.55
20 000-99 999	-0.04	0.03		0.96	0.28	0.03	***	1.33
100 000-999 999	-0.07	0.03	*	0.93	0.14	0.04	***	1.15
	Highest educational level of a parent (reference: ISCED 5-6)							
ISCED 0-2	2.96	0.07	***	19.29	2.19	0.04	***	8.90
ISCED 3	2.69	0.07	***	14.76	2.14	0.03	***	8.51
ISCED 4	1.01	0.07	***	2.74	0.93	0.04	***	2.53

Source: Statistik-Austria, 2015, p. 9.

Conclusions

This chapter focused on the intergenerational mobility of immigrants' offspring in Austria and in particular on those of Yugoslav and Turkish descent, since these two groups comprise the largest set of immigrants' children in Austria. On average, immigrants and their children have lower educational outcomes than natives. For those emigrating from the former Yugoslavia and Turkey, the average level of education is particularly low; the latter group has the lowest levels of educational attainment. Interestingly, some data show that the children of immigrants in Austria perform worse than those who emigrated themselves.

One of the main reasons that immigrants' offspring have such low levels of educational attainment is that their parents also have poorer educational outcomes. In Austria, the children of immigrants are not as successful in surpassing the educational level of their parents as in other countries. The relatively low level of upward mobility for this group has at least three causes. First, the overall lower rates of preschool attendance for the children of immigrants have given them a disadvantage from the outset of their schooling and human capital development. It is a good sign that the preschool attendance rate of the children of immigrants has grown rather markedly during the past decades; these days, attendance rates are more similar for those of native and foreign descent. However, the language deficiencies faced by immigrants' children may make the quality of the preschool experience less potent than it is for natives' children. These difficulties can be improved only by special assistance, first at preschool and further on in primary school. However, such assistance needs high-quality personnel as well as an upgrading of endowments for schools.

The second major issue that hinders the ability of immigrants' offspring to be upwardly mobile occurs at age ten. After the first four years of primary school, parents (in collaboration with their child's teachers) must decide if their children will join a lower secondary school (*Hauptschule*) or upper secondary school (*Allgemeinbildende Höhere Schule*; *AHS*). Pupils with parents from the former Yugoslavia and Turkey have very high rates of enrolment at lower secondary schools. These pupils also have rather high rates of enrolment in "special schools" (*Sonderschulen*). This early school streaming and the fact that the children of immigrants are more likely to join the non-academic stream mean that there is an educational segregation within the population as early as at the age of ten, which is very difficult to overcome later.

The third step where educational careers become separated occurs at age 15 when children (and their families and teachers) must decide whether they will join polytechnic schools, which usually continue with an apprenticeship, or instead join academic secondary schools. Only a certificate from these latter schools grants access to university education. The descriptive empirical data here (that is, not accounting for parental education) show that the decision for an apprenticeship education is much higher for pupils from the former Yugoslavia and Turkey than for native pupils. These streaming choices at age 15 further perpetuate the inability of immigrants' children to surpass their parents' levels of education.

To conclude, these three strongly interlinked "dividing lines" are major barriers to the ability of immigrants' offspring to be upwardly mobile. The starting point of general separation of children of foreign and native descent begins in the very early days of the child's development. The focus of every educational and developmental policy should therefore be to strongly encourage the further development of preschool education, with additional resources for language training for the children of immigrants.

Notes

1. These countries are Austria, Belgium, Switzerland, the Czech Republic, Germany, Estonia, France, Croatia, Luxembourg, Latvia, and the United Kingdom. The parents were born in a country other than the descendant's current place of residence (that is, there is no differentiation between those with an EU or a non-EU migration background).
2. Numbers are calculated from 1 January of each year.
3. Croatia has been allocated to the "new" EU Member Countries and not to the former Yugoslavia.
4. Note that these numbers account for citizenship and not naturalised persons.
5. Russia is a unique case that is beyond the scope of this chapter.
6. Table 1.2 does not present any information about the age of the immigrants' offspring. However, those from the former Yugoslavia and Turkey are by far the oldest cohort on average.
7. More details can be seen in Annex Table 1.A.2, where the enrolment rates by type of schools are calculated for pupils with foreign citizenship by many more countries of origin.
8. The following section relies to a large extent on Altzinger et al., 2013.
9. For the level of education the module used the International Standard Classification of Education (ISCED). ISCED 0-2: Compulsory school; ISCED 3: Apprenticeship, intermediate technical and vocational school; ISCED 4: Academic secondary school, higher technical and vocational college; ISCED 5-6: Post-secondary college, Fachhochschule, university.
10. If for example the respondents' parents had their children on average at age 22, then the parents were born at some point between 1930 and 1964. Hence they are a clearly older cohort in this dataset.
11. The past decades have shown a general rise in the educational attainment levels of the Austrian population. While in 1971 57.8% of the Austrian population between 25 and 64 had completed compulsory education only, in 2014 this share decreased to 19.1%. All forms of education subsequent to compulsory schooling showed significant gains (Statistik-Austria, 2017a).
12. In contrast to the ISCED classification used elsewhere, Oberdabernig and Schneebaum combined ISCED 3 and ISCED 4 into one group.
13. Note that these figures come from calculations for the subsample whose parents do not have the highest education level (that is, for the descendants who could be upwardly mobile).
14. It is important to be aware that also the younger age group was born between 1967 and 1986, and hence joined preschool in the period between 1967 and 1992. In comparison with more current figures, the attendance rates during that period were relatively low. Actually the attendance rate of 3-5 year-old children is above 90% for both natives' and immigrants' children.

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Annex 1.A. Additional tables

Annex Table 1.A.1. Population by citizenship, Austria, 2002-17

Citizenship	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total	**8 063 640**	**8 100 273**	**8 142 573**	**8 201 359**	**8 254 298**	**8 282 984**	**8 307 989**	**8 335 003**	**8 351 643**	**8 375 164**	**8 408 121**	**8 451 860**	**8 507 786**	**8 584 926**	**8 700 471**	**8 772 865**
Austrians	**7 333 379**	**7 353 520**	**7 388 357**	**7 426 958**	**7 457 632**	**7 478 205**	**7 478 310**	**7 474 999**	**7 468 064**	**7 461 961**	**7 456 692**	**7 447 592**	**7 441 672**	**7 438 848**	**7 432 797**	**7 430 935**
Non-Austrians	**730 261**	**746 753**	**754 216**	**774 401**	**796 666**	**804 779**	**829 679**	**860 004**	**883 579**	**913 203**	**951 429**	**1 004 268**	**1 066 114**	**1 146 078**	**1 267 674**	**1 341 930**
Share of Non-Natives (%)	9.1	9.2	9.3	9.4	9.7	9.7	10.0	10.3	10.6	10.9	11.3	11.9	12.5	13.3	14.6	15.3
EU-27 and EFTA	**257 855**	**267 758**	**278 694**	**297 275**	**316 614**	**331 313**	**356 116**	**379 832**	**397 314**	**420 249**	**447 971**	**483 288**	**527 369**	**579 163**	**625 488**	**664 729**
EU-27	250 544	260 556	271 339	289 708	308 877	323 356	348 098	371 659	389 130	411 843	439 464	474 641	518 670	570 298	616 401	655 524
EU-14 (before 2004)	110 861	115 090	122 394	131 839	143 473	154 033	165 872	177 746	186 375	196 948	206 349	217 776	230 730	241 231	253 055	262 803
Germany	75 262	78 227	83 592	91 194	100 439	109 193	118 942	128 706	136 021	144 102	150 867	157 793	164 820	170 475	176 463	181 618
Italy	10 656	10 859	11 305	11 727	12 178	12 680	13 197	13 868	14 544	15 387	16 212	17 831	20 195	22 465	25 327	27 290
Others	24 943	26 004	27 497	28 918	30 856	32 160	33 733	35 172	35 810	37 459	39 270	42 152	45 715	48 291	51 265	53 895
EU-13 (since 2004)	139 683	145 466	148 945	157 869	165 404	169 323	182 226	193 913	202 755	214 895	233 115	256 865	287 940	329 067	363 346	392 721
Bulgaria	4 690	5 335	5 856	6 284	6 480	6 419	7 605	8 881	9 846	11 172	12 472	14 144	15 942	19 607	22 411	24 923
Croatia	61 422	62 478	62 163	61 869	61 126	59 632	59 229	58 946	58 505	58 279	58 297	58 619	61 959	66 475	70 248	73 334
Poland	21 433	21 750	22 249	26 554	30 580	33 319	35 347	36 563	37 231	38 577	42 089	45 965	50 271	54 262	57 589	60 079
Romania	17 750	19 482	20 483	21 314	21 942	21 882	27 654	32 214	36 004	41 586	47 315	53 261	59 702	73 374	82 949	92 095
Slovak Republic	7 508	8 516	9 484	11 322	12 982	14 223	15 768	17 928	19 211	20 381	22 547	25 333	28 612	32 052	35 326	38 094
Slovenia	7 036	6 979	6 905	7 063	7 137	7 229	7 502	7 688	7 838	8 033	8 593	9 592	11 289	13 507	15 487	17 312
Czech Republic	6 231	6 597	6 896	7 360	7 733	7 986	8 564	8 925	9 061	9 274	9 635	10 232	10 908	11 631	12 269	12 629
Hungary	13 069	13 684	14 151	15 133	16 284	17 428	19 233	21 276	23 342	25 627	29 832	37 004	46 264	54 939	63 550	70 584
Baltic States, Malta,Cyprus	544	645	758	970	1 140	1 205	1 324	1 492	1 717	1 966	2 335	2 715	2 993	3 220	3 517	3 671
EFTA	7 311	7 202	7 355	7 567	7 737	7 957	8 018	8 173	8 184	8 406	8 507	8 647	8 699	8 865	9 087	9 205
Former Yugoslavia & Turkey	**371 878**	**374 741**	**365 716**	**356 396**	**351 884**	**343 012**	**342 479**	**342 843**	**343 695**	**346 707**	**348 824**	**353 147**	**359 229**	**366 251**	**372 961**	**377 979**
Former Yugoslavia (excl.	244 731	247 585	242 673	239 852	238 816	234 823	233 717	232 858	232 393	234 246	235 907	239 477	244 489	250 818	256 935	261 141

Citizenship	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Croatia)																
Serbia	123 009	124 836	122 203	123 205	125 371	123 353	122 705	110 025	109 377	110 469	110 439	111 280	112 477	114 289	116 626	118 454
Bosnia and Herzegovina	107 248	107 046	103 981	99 557	96 128	93 380	92 557	91 831	90 528	89 575	89 578	89 925	90 963	92 527	93 973	94 611
Kosovo								12 159	13 502	14 694	16 091	17 943	19 872	22 007	23 386	24 445
Macedonia	14 474	15 703	16 489	17 090	17 317	17 251	17 542	17 929	18 095	18 620	18 883	19 377	20 135	20 852	21 723	22 354
Montenegro						839	913	914	891	888	916	952	1 042	1 143	1 227	1 277
Turkey	127 147	127 156	123 043	116 544	113 068	108 189	108 762	109 985	111 302	112 461	112 917	113 670	114 740	115 433	116 026	116 838
Others	**100 528**	**104 254**	**109 806**	**120 730**	**128 168**	**130 454**	**131 084**	**137 329**	**142 570**	**146 247**	**154 634**	**167 833**	**179 516**	**200 664**	**269 225**	**299 222**
Asia	36 889	41 668	45 392	48 726	50 987	52 606	56 763	58 856	61 946	64 024	69 113	77 623	84 167	98 172	156 973	180 335
Afghanistan	2 065	2 692	3 086	3 306	3 093	3 139	3 957	4 484	5 662	6 688	9 353	12 380	14 016	16 779	35 618	45 259
Syria	633	708	760	910	921	940	1 144	1 237	1 459	1 591	1 913	2 689	4 268	11 255	33 313	41 672
Iraq	1 319	1 306	1 396	1 384	1 292	1 342	1 774	1 975	2 255	2 454	2 720	3 015	3 240	3 873	13 884	14 802
Iran	5 643	5 639	5.646	5 387	5 081	5 256	5 733	5 560	5 693	5 844	5 950	7 196	7 980	8 459	11 637	13 764
China	5 122	6 478	7 605	8 275	8 765	8 925	9 295	9 409	9 501	9 476	9 669	10 191	10 765	11 374	12 161	12 685
India	5 047	5 518	5 690	5 698	5 950	5 884	6 005	6 060	6 177	6 228	6 547	7 026	7 406	7 853	8 340	8 639

Source: Statistik-Austria, 2017a, authors' own calculations.

Annex Table 1.A.2. Pupils by citizenship and type of school, percentages in Austria and differences in percentage points to Austria

	Primary school	Lower secondary	Secondary school	Special school	Polytechnic	**College**	Vocational school I	Vocational school II	Vocational college
Austria	**30.2**	**2.6**	**16.5**	**1.3**	**1.5**	**19.0**	**10.8**	**4.8**	**13.4**
Unknown	18.5	1.1	15.9	1.3	2.2	**-15.6**	-8.2	-3.1	-12.2
Turkey	5.2	-0.1	9.3	2.0	1.7	**-12.8**	-0.2	1.1	-6.2
Former Yugoslavia	1.3	-0.1	6.3	1.1	1.5	**-9.6**	0.2	1.2	-2.0
Slovenia	5.7	-1.5	1.0	-0.7	0.7	**-4.9**	-5.0	-0.8	5.4
Africa	9.1	-0.2	3.8	1.6	1.0	**-4.7**	-4.7	2.3	-8.1
Hungary	12.4	-0.6	4.7	-0.1	0.3	**-4.7**	-5.9	-1.5	-4.7
Asia	8.3	0.2	4.5	0.3	2.1	**-4.7**	-4.2	0.2	-6.7
Other EU members	13.7	-0.2	3.6	0.5	0.8	**-4.5**	-5.0	-1.1	-7.8
Croatia	-2.7	-0.2	3.1	-0.3	0.7	**-4.4**	-0.9	1.7	3.0
Other Europe	6.2	-0.5	4.2	1.0	0.8	**-4.3**	-3.4	0.5	-4.4
Czech Republic	5.1	0.2	-4.0	0.0	-0.3	**-3.7**	-7.5	6.2	4.0
Slovak Republic	15.1	0.3	1.1	0.4	0.5	**-3.6**	-6.1	-1.2	-6.6
EU-27 (without Austria)	7.2	-0.5	0.6	0.2	0.3	**-0.7**	-3.1	-0.2	-3.8
Poland	12.8	-0.9	-1.1	-0.3	0.0	**0.5**	-5.3	-0.7	-5.0
Italy	3.5	-1.5	-3.1	-0.4	-0.3	**6.9**	0.3	-1.3	-4.0
Germany	1.3	-0.8	-4.4	0.4	-0.3	**7.4**	0.6	0.0	-4.3
America	-1.7	-0.6	1.8	0.4	0.5	**7.4**	-2.8	0.4	-5.3
Australia / Oceania	0.3	0.6	-7.1	1.0	-0.2	**24.3**	-8.9	-3.7	-6.3

Note: Line 1 shows the structure of pupils with Austrian citizenship by different types of schools. All other percentages are deviations from the Austrian pattern. i.e. only 6.2% of all pupils with Turkish citizenship attend colleges. Hence the deviation to Austrian pupils is -12.8 percentage points.
Source: Statistik-Austria, 2017a, authors' own calculations.

Chapter 2. France: Intergenerational mobility outcomes of natives with immigrant parents

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This chapter provides an overview of the intergenerational mobility outcomes of immigrants' children in France, focusing on both education and labour market outcomes. A large share of the results stem from the Trajectories and Origin Survey (TeO), which was produced by the Institut national d'études démographiques (INED) and the Institut national de la statistique et des études économiques (INSEE). The TeO Survey allows for comparison of the outcomes of natives with immigrant parents with those of natives with native parents. Objective measures of inequalities, for instance in educational trajectories, unemployment and wages, are combined with self-reported measures of discrimination and viewpoints on social mobility. Overall, these results show that upward mobility is not evenly distributed among the offspring of immigrant parents and that gender, in addition to origin, is a major variable to take into account. Those whose parents arrived from outside Europe are generally at a disadvantage when compared with other immigrants' children. More specifically, the sons of North and sub-Sahara African immigrants repeatedly appear to be in a position of disadvantage when compared to their fathers and sisters.

Main findings

- Native-born children of immigrants represent about 10% of the population living in France. The majority of this heterogeneous group has parents that originate from southern Europe and the Maghreb, and a working class family background.
- Natives with immigrant parents generally suffer from an early educational disadvantage, i.e. disadvantage that is already manifest in pre-school and primary school. A wealth of evidence has demonstrated that this impediment is largely due to their socio-economic background.
- Statistical analyses of official data from the Ministry of Education have shown that immigrant parents have high aspirations for their children, indeed higher than those of native-born parents. These are frequently linked to the parents' hopes of intergenerational social ascension for their offspring.
- Intergenerational socio-economic mobility of children of immigrants varies significantly by gender and parental origin group. Sons of immigrants from outside Europe experience serious difficulties in school, especially at the lower secondary level. One out of four immigrants' sons in France remains without a diploma at the end of secondary school. Among the sons of native-born parents, the ratio is one out of ten.
- The gender gap in educational attainment is larger among immigrants' children than among children born from French native parents, with girls frequently outperforming boys.
- Qualitative evidence suggests that the better performance of girls may be partly linked with stereotypes that tend to favour girls with immigrant parents over boys. Overall, natives with immigrant parents report more frequently – by a factor of two to three – than natives with French native parents that they have experienced unfair treatment while they were at school. The differences between the two groups are particularly large for boys.
- Less than 5% of children with Turkish immigrant parents receive help with homework from their mothers compared to over 22% of children with Algerian immigrant parents and over 30% of children with parents from Sub-Sahara Africa. In contrast, native-born mothers help their children with homework in more than 60% of cases.
- Maghrebi immigrants' daughters stand out as displaying an especially large upwards move in educational attainment: the proportion experiencing upward mobility is indeed the highest among women of all origins and higher than that of men with Maghrebi parents.
- While daughters of immigrants achieve a higher educational level than sons at school, they tend to be more disadvantaged upon entering the labour market.
- In the labour market, natives with immigrant parents are penalised in various ways. They are unemployed more frequently and when employed, they have lower salaries than natives' children. Multivariate analyses show that part of these penalties remain after controlling for individual and family characteristics, especially among those of non-European origin and that they are correlated to the self-reported experience of discrimination.

- Because of their lower starting point, immigrants' children are more likely to experience intergenerational socio-professional upward mobility than natives' children. However, they usually climb fewer steps than natives born to natives.

Introduction

In the first decades of the 21st century, about one person out of ten living in France was born to at least one immigrant parent (Borrel and Lhommeau, 2010; Brutel, 2017). Since the 1980s, the integration of this population into French society has been a matter of growing policy and social concern. Classical assimilation theory has held that the socio-economic outcomes of the native offspring of immigrants eventually converge with those of the children of natives. That notion is now questioned. Rather than a unique path of assimilation, consisting in an upward social mobility from immigrants to their offspring, recent studies suggest that the social trajectory of natives with immigrant parents varies by country of origin. This chapter reviews the existing literature to examine the education and employment outcomes of the native-born children of immigrants in France, comparing them to those of both natives' children and immigrants themselves. The focus is on immigrants' children in France as an entire group rather than on specific groups, with a twofold objective: first, to identify groups with a socio-economic disadvantage and second, to try to explain why immigrants' children exhibit different social mobility patterns. Whenever possible, special attention is paid to gender differences in order to discern whether women experience a double disadvantage associated with both gender and origin. The results of recent studies suggest otherwise – that, in many respects, girls and women with origins outside Europe tend to fare better than their male counterparts.

The offspring of immigrants does not form a homogeneous group in France (Table 2.1). The majority of them were born to parents who arrived from southern Europe (Spain, Italy, Portugal) and later from the Maghreb (Algeria, Morocco, Tunisia) to participate in post-war reconstruction in the secondary sector (construction, automobile industries, etc.). The great majority of these parents were working class (e.g. 79% among those from Algeria, against 46% among native parents). In the 1970s, the composition of the immigrant population changed and new arrivals started coming from sub-Saharan Africa, Turkey and Southeast Asia. As these groups are much smaller than the groups previously cited, their native-born children are very rarely identified in surveys, and the very few data available do not allow any study of their socio-economic trajectories or outcomes.

Table 2.1. The parental background of children of immigrants

Natives with at least one immigrant parent, aged 18-50 in 2008

	Parents' background			Parents' occupation		(6) Mean age
	(1) Country of origin	(2) Mixed parentage	(3) Parents arrived in France before age 10	(4) Manual labourers	(5) Managers or professionals	
Algeria	20	33	15	79	2	32
Morocco and Tunisia	15	29	10	71	6	28
Sahelian Africa	2	22	6	76	8	25
Central Africa and Gulf of Guinea	2	45		43	25	26
Southeast Asia	3	42	10	51	16	27
Turkey	2	10	13	68	3	24
Portugal	14	35	19	74	2	29
Spain and Italy	25	67	39	62	5	37
Other EU-27 countries	9	90	28	47	20	36
Other countries	8	61	12	43	17	29
Mainstream population	-	-	-	46	13	35

Note: 1. Children with Algerian parents represent 20% of all children of immigrants aged 18-50 and living in France in 2008; 2. 33% of Algerian offspring have only one immigrant parent; 3. 15% of the Algerian immigrant parents arrived in France before they were 10 years old; 4. by the age of 15, 79% of the children of Algerian immigrants had at least one parent who was manual labourer; 5. by the age of 15, 2% of the children of Algerian immigrant(s) had at least one parent who was a manager or professional; 6. the mean age of Algerian immigrants' children (aged 18-50) was 32.
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Adapted from Beauchemin, Lhommeau and Simon, 2015. Weighted results.

An exception is the Trajectories and Origin Survey (hereafter TeO), the results of which largely inform this chapter (Box 2.1). The survey shows that this later generation of immigrants' children has a very different social background, with a larger proportion of parents having a high socio-economic status. For example, 25% of children of immigrants coming from a country on the Gulf of Guinea have parents with a managerial or professional occupation, against 13% in the "mainstream population" (a term defined in Box 2.1). Obviously, among many other characteristics, socio-economic outcomes of the offspring of immigrants depend on their social background. That is why this chapter presents results of multivariate analyses to complement the descriptive figures as often as possible.

Studies of the patterns of intergenerational mobility in the migrant population – the focus here – are in fact very rare in France. This might be partly explained by methodological issues. First, because of data availability, studies tend to compare immigrants' children with the natives' children or with immigrants themselves in a cross-sectional perspective, rather than analysing intergenerational mobility properly by comparing children with their actual parents. Second, interpreting social mobility is more complex in the immigrant population than in the native population, because immigrants and their children often experience widely different social contexts. For example, the chapter will show that comparing the education levels of children and parents in France who grew up in very different contexts may prove to be a complex exercise.

Box 2.1. The Trajectories and Origins Survey (TeO)

The TeO survey, produced by the Institut national d'études démographiques (INED) and the Institut national de la statistique et des études économiques (INSEE), aims to describe and analyse the living conditions and social trajectories of individuals in relation to their social origins and their migration history. Around 22 000 individuals born between 1948 and 1990 living in an ordinary household in metropolitan France were interviewed in 2008. For the children of immigrants, the representative scope of the survey was limited to individuals born after 1958.

The sample includes around 8 400 foreign-born immigrants, 8 100 native children of foreign-born immigrants, and 5 100 other French natives (including repatriates, overseas migrants, and their children). Unique methodological efforts were undertaken in this survey to over-sample the children of immigrants and thus to allow for a representative analysis and to distinguish them from children of repatriates – a crucial distinction to avoid bias in the measurement of differences by origin (Meurs, Pailhé, and Simon, 2006; Alba and Silberman, 2002). As the survey focused on discrimination, it also included a subsample of migrants coming from French overseas territories (the *départements d'outre-mer* or DOM) and a subsample of their children.

In TeO, the term "**mainstream population**" refers to persons residing in metropolitan France who are neither immigrants nor DOM native-born, children of immigrants or children of the DOM native-born.

The TeO questionnaire explores migration history, describing educational and occupational trajectories, residential histories, housing conditions, family life, and the transmission of languages and religion. On a cross-sectional basis, it examines individuals' access to goods and services (employment, housing, healthcare, etc.) and the discrimination they may experience in these areas.

More information is available on the TeO website at http://teo.site.ined.fr/. The survey methodology is presented in (Beauchemin, Hamel, and Simon, 2015).

Education

The deep gender gap for the offspring of immigrants in France

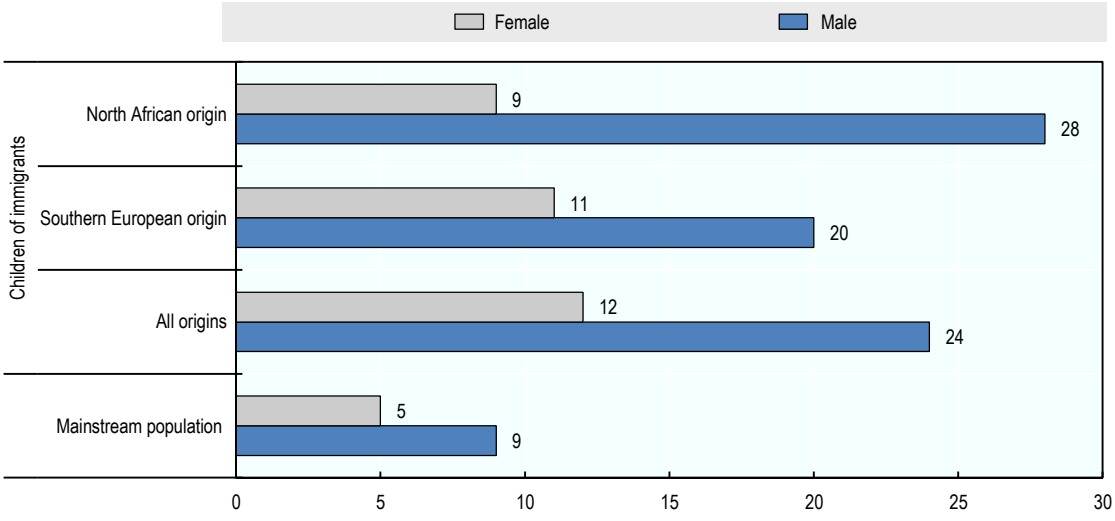
For many years the educational outcomes of the children of immigrants remained unknown in France because data allowing them to be identified were not available (Simon, 2003). The first systematic and very influential study came out in 1996. Using a proxy measurement of origin in panel data from the French Ministry of Education, Vallet and Caille (1996) showed that among children who entered upper secondary school in 1989, those with an immigrant background clearly suffered from an early educational disadvantage that could be identified at the primary and lower secondary levels (higher dropout rates, lower academic performance). This group's disadvantage was confirmed by all subsequent studies, whatever the source of data. Some of them showed that inequalities vary significantly by gender.

That girls perform better at school than boys is not an unusual result (Felouzis, 1993). Rather, what is striking is that the gender gap is much deeper with the children of immigrants than with the mainstream population. Using ministry panel data (cohort

entering 6th grade in 1995), Brinbaum and Kiefer (2009) showed that "most high achievers among immigrants' children are girls, particularly of North African origin" (p. 541). In this group, boys are three times more likely than girls to drop out of secondary school without any diploma, with proportions reaching 28% for boys against 9% for girls (Figure 2.1), while the ratio is below two in the mainstream population (9% for boys and 5% for girls). Results of the TeO Survey confirm a gender gap that is deeper among immigrants' children. While the proportion without the BEPC diploma (*brevet des collèges*, obtained in France at the end of lower secondary school) is 15% for men vs. 10% for women in the second generation, it is 8% and 7% respectively in the mainstream population (Table 2.2). TeO results also show striking differences by origin. Notably, the sons of immigrants from Africa and Turkey have the highest share of students that do not graduate at the end of lower secondary school[1]: between 19% and 27%, compared to "only" 8% in the male mainstream population (Table 2.2). In other terms, among visible minorities, one young man out of four or five lacks the lowest diploma that exists in France. On the other hand, sons and daughters of immigrant(s) of European origin have generally better outcomes than those of non-European origins, and – in some cases – even better than those of the mainstream population (Table 2.2).

Figure 2.1. Share of persons without qualification at the end of secondary school

Natives with two immigrant parents and mainstream population who entered lower secondary school in 1995, percentages



Note: No qualification means no diploma from secondary school – that is to say, neither the BEPC (diploma at the end of lower secondary school) nor any sort of *baccalauréat* (diploma at the end of upper secondary school), nor vocational qualification (including CAP [*certificat d'aptitude professionnelle*], BEP [*brevet d'études professionnelles*] and *brevet de technicien*).
Source: INSEE, DEPP (Direction de l'Evaluation, de la Prospective et de la Performance), 1995 panel of students entering lower secondary school in 1995 and its follow-ups the survey Famille 1998 and the survey Jeunes 2002. Adapted from Brinbaum and Kieffer, 2009, Table 7b.

Table 2.2. Proportion of natives with immigrant parents who do not hold a secondary school diploma

By gender and origin, aged 18-35 in 2008, percentages

	% without the BEPC or equivalent (final diploma lower secondary school)			% without any upper secondary diploma			% without the baccalauréat or equivalent (final diploma upper secondary school)		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Overseas territories	13	2	8	18	10	14	52	30	41
Algeria	20	16	18	32	26	29*	59	49	54
Morocco and Tunisia	19	10	15	32	16	24	55	37	45
Sahelian Africa	19	6	13	29	17	23	60	42	52
Central Africa and Gulf of Guinea	24	11	16	30	18	23	54	31	40
Southeast Asia	14	9	11	18	16	17	42	30	37
Turkey	27	26	27	35	39	37	74	62	69
Portugal	14	7	11	20	11	16	59	36	49
Spain and Italy	10	8	9	18	17	17	48	34	42
Other EU-27 countries	5	7	6	10	18	14	19	25	22
Other countries	9	7	8	14	11	13	35	19	28
Immigrants' children - All origins	15	10	13	24	18	21	52	38	45
Mainstream Population	8	7	8	16	13	14	41	35	38
All 18-35 year-olds	9	8	9	17	13	15	43	35	39

Note: Individuals were born in France and have at least one parent who was born abroad without French citizenship. The second column "% without any upper secondary diploma" includes persons with or without the BEPC.
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Figures from Tables 1 and 3 of Brinbaum et al., 2015. Weighted results.

In their pioneering analysis, Vallet and Caille (1996) showed that the difficulty for natives with immigrant parents mostly had to do with their social origin. This result is echoed throughout much of the literature, remaining valid in most subsequent quantitative studies in France. However, it is a debated issue whether some inequalities by origin persist with all other things being equal. Results vary depending on the indicator and, obviously, on the list of independent variables that are introduced in the models. According to Vallet and Caille (1996), children with a migration background had, other things being equal, greater results in primary and lower secondary schools than their native peers with no migration origins. Subsequent work with the same data following educational paths up to the end of upper secondary school confirmed, on average and again other things being equal, the net advantage of children with immigrant parents (Brinbaum and Kieffer, 2009).

However, the same data also showed that youths from that group more frequently goes onto vocational tracks, which are the least prestigious, than those of the mainstream population (Brinbaum and Lutz, 2017). PISA results (OECD, 2016) also show that students with a migration background (including immigrants and their offspring) are more likely to have a lower performance in science than children of natives after controlling for socio-economic status (SES), even though the socio-economic background matters

relatively more in France than in other OECD countries (OECD, 2016, p. 252). Beyond the general effect of migration, these results obscure important inequalities by specific origin, gender and also education level.

In fact, the social background does not systematically or uniformly explain the overall disadvantage of natives with immigrant parents. In multivariate analyses of the TeO Survey, the remaining effect of origin varies by gender and also by level of education (Table 2.3). At this point it is instructive to look at some of the pivotal moments of educational trajectories in France. At the BEPC level (lower secondary diploma), results show that young males with Turkish and African origins have a significantly higher probability of not obtaining a degree than the French mainstream population whereas girls with parents from Africa show no such difference. Among girls, only those with parents from Turkey have a significantly higher probability of not obtaining a diploma compared to the mainstream population. At the *baccalauréat* level (upper secondary level), the male ethnic "penalty" disappears, except for those with Turkish parent(s).[2] As for women, all things being equal and again with the exception of the Turkish group, they have in fact *higher* odds of obtaining their diploma than natives' daughters. Finally, at the university level, almost all differences disappear between immigrants' native offspring and the mainstream population, for both men and women.

Overall, these results show that gender and ethnic differences diminish at higher educational levels. Such a result raises an important interpretation issue, with policy implications. On one hand, Vallet (1996) interprets the convergence of the school results of the children of immigrants with those of the mainstream population as a sign of "schooling assimilation". On the other hand, this convergence can also be interpreted in terms of institutional selection. TeO findings also suggest that there are important gender differences: Whilst boys achieve significantly lower results at the BEPC level, girls are indistinguishable at the secondary level and outperforming their peers with French native parents at the university level. What explains these differences in educational achievement among immigrants' sons and daughters?

Table 2.3. Probabilities of natives with immigrant parents not to obtain a diploma at the end of secondary school

Odds ratios by gender and origin in comparison with the mainstream population, persons aged 18-35 in 2008

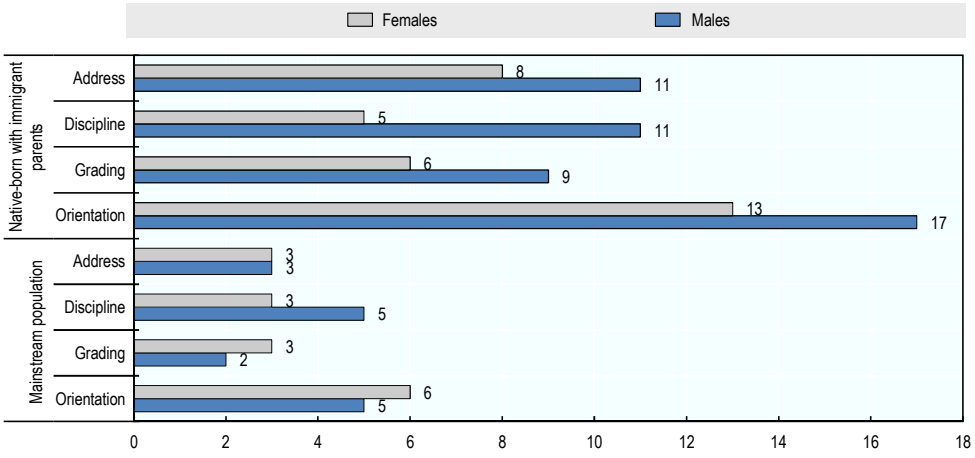
	BEPC or equivalent (final diploma lower secondary school)		*Baccalauréat* or equivalent (final diploma upper secondary school)		University diploma or equivalent	
	Men	Women	Men	Women	Men	Women
Mainstream population (ref.)	1.0	1.0	1.0	1.0	1.0	1.0
Overseas territories	-	0.5	-	0.6	-	-
Algeria	1.5	-	-	0.7	-	-
Morocco and Tunisia	1.4	-	-	0.5	-	-
Sahelian Africa	-	-	-	0.6	-	-
Central Africa and Gulf of Guinea	2.0	-	-	0.6	-	-
Southeast Asia	-	-	-	-	-	-
Turkey	1.6	2.4	1.7	1.4	-	-
Portugal	-	0.6	-	0.7	0.6	-
Spain and Italy	-	-	-	-	-	-
Other EU-27 countries	-	-	0.4	0.5	-	-
Other countries	-	-	0.4	0.5	-	-

Notes: Each column corresponds to a separate logit model. For each, control variables are the following: parents' education level and socio-economic status; living conditions (financial resources, housing conditions); structure of the family (number of siblings, co-residence with both parents or not); parents' investment in education (private lessons); previous grade repetition; proportion of students in the school with a migration background.
Non-significant results are not shown. Values between 0 and 1 indicate a negative effect of origin on the probability of not obtaining a diploma, i.e. a lower risk of not obtaining a diploma. Values above 1 indicate a positive effect, i.e. a higher risk of not obtaining a diploma. For instance, native women with an immigrant parent or parents from overseas territories are less likely not to obtain the BEPC than their peers from the mainstream population; native men with an immigrant parent or parents from Algeria have a greater risk of not obtaining their BEPC than their peers in the mainstream population.
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Figures excerpted from Tables 4 and 5 of Brinbaum et al., 2015. Weighted results.

Based on the review of qualitative research conducted in the 2000s, Lorcerie (2011) shows that the French education system carries two distinct and opposite ethno-gender biases. One favours young women with non-European background and especially from Muslim families: they are seen as persons who deserve special attention in order to be protected from the supposed sexism of their family environment. On the other hand, boys of the same origins suffer from negative stereotypes associated with delinquency and deviant behaviours. These observations echo statistical results on perceived unfair treatment in the education system. While men and women in the mainstream population declare fairly similar treatment at school, immigrants' sons report much more frequently than immigrants' daughters the feeling that they were treated differently in terms of grading, discipline, the way they were addressed, and the school's recommendation as to which stream they should follow at the end of lower secondary school (Figure 2.2).

Figure 2.2. Share of students declaring they felt unfairly treated while they were at school

Native-born with immigrant parents and mainstream population, aged between 18 and 35 in 2008



Notes: Natives with immigrant parents were born in France and have at least one parent who was born outside France without French citizenship. 8% of the women born to immigrants declare that they felt unfairly treated in the way they were addressed by their teachers.
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Figures excerpted from Brinbaum and Primon, 2013. Weighted results.

Differences in the way young men and women are treated are observed not only in schools but also in families. Challenging the common wisdom that girls would be disadvantaged in families of extra-European background, Moguérou and Santelli (2015) have actually shown a reverse pattern of schooling support in immigrant families. While fathers in the mainstream population help their sons with their homework more frequently than their daughters, immigrant fathers, with the sole exception of those from sub-Saharan Africa, tend to help their daughters more than their sons (Table 2.4). Thus the question arises: why do immigrants' parents invest more in girls' education? Qualitative research among Maghrebi families show that girls are more controlled than boys, spend more time at home, and (thus) are less distracted from their schoolwork (Moguérou and Santelli, 2015). This is reflected in the fact that immigrants report more conflicts about school with their sons than with their daughters: 27% of both mothers and fathers report such conflicts with their boys, against 13% of the fathers and 15% of the mothers with their girls (Attias-Donfut and Wolff, 2009).

Also, in offering their support, parents would accord priority to the children who have the greater success at school. Once they realise that daughters are more likely to succeed and to fulfil their dream of upward social mobility, they switch attention from boys to girls. This process, especially observed in Maghrebi families, is labelled "the diagonal of the generations" (Delacroix, 2004). It could also reflect the fact that migrant families – at least some of them – see in formal education a way for the girls to escape the role traditionally assigned to women, and a path to financial autonomy and social emancipation. Although this aspiration for greater autonomy for women is usually attributed to the mothers and daughters themselves, the fathers' involvement suggest that they also contribute to this social change (Table 2.4). This result tends to contradict received wisdom about gender roles in extra-European families, especially in Muslim culture. It calls for further research to better disentangle the role of personal, maternal and paternal aspirations to explain the relative success of immigrants' daughters.

Table 2.4. Share of children receiving help with homework from their immigrant fathers and mothers

Immigrants' children and mainstream population aged 25-40, from a working class background, percentages

		Mainstream population	Algeria	Morocco and Tunisia	Sub-Saharan Africa	Turkey	All children of immigrants
Help from father		36	17	21	20	5	18
	Sons	37	15	18	22	4	16
	Daughters	35	18	24	19	6	20
Help from mother		66	22	22	36	3	21
	Sons	64	21	21	34	4	21
	Daughters	68	22	23	36	2	22

Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Reproduction from Moguérou and Santelli, 2015, Table 1. Weighted results.

Whatever the gender of their child, immigrant parents are less able than other parents to help their children with their homework because of language barriers and other socio-economic handicaps. In the early 1990s, according to data from the French Ministry of Education, 81% of immigrant mothers declared they felt overwhelmed with their children's homework vs. 51% among native mothers from the working class (Brinbaum, 2013). However, immigrant families use alternative resources to compensate for their own difficulties to monitor and support their children's formal education. On the one hand, siblings play a great role. In immigrant families, the youngest are more often supported by their elder siblings than is the case among natives with a similar social background (Brinbaum, 2013; Moguérou and Santelli, 2015). On the other hand, immigrant families also use school support services more often, usually provided at no cost by associations. While only 8% of the mainstream population aged 18-35 in 2008 frequented free tutoring classes when they were at school, the average proportion is 19% among natives with immigrant parents, and the proportion rises to 35% among those of Sahelian origin, i.e. mainly from Mali and Senegal (Brinbaum, Moguérou, and Primon, 2015). This high frequentation of tutoring classes certainly reflects the fact that immigrants' children have more difficulties at school than other children. It also suggests that parents with a migration background are concerned with their children's school success.

In fact, the question of parental aspirations for their children has sparked a great deal of interest in migration studies in France. In their pioneer work, Vallet and Caille (1996) showed that immigrant families have, other conditions remaining the same, higher aspirations for their offspring in terms of educational achievement than native-born parents. This was observed by later panels following younger generations (Brinbaum and Kieffer, 2009) and confirmed by several studies combining qualitative and quantitative methods that focused particularly on extra-European migrants (Moguérou and Santelli, 2015; Brinbaum and Delcroix, 2016). The rationale for this native-immigrant difference is that the migration project is fuelled by an aspiration for upward social mobility. The transmission from the parents to their children of their family history, especially in terms of intergenerational social ascension, is thought by several authors to be a success factor for the children (Santelli, 2000; Moguérou and Santelli, 2015; Brinbaum and Delcroix, 2016). According to Vallet (1996), the French school system is especially adapted to take on board families' expectations for two reasons. First, families' wishes play a major role

in the school's recommendations for upper secondary school streaming. Second, the bifurcation between the academic and vocational tracks happens later than in other countries, such as Germany.[3] That grants immigrant families and their children time to adapt to the French school system and adopt more informed strategies.

From one generation to the next: Educational mobility upward or downward?

To what extent do immigrant families' expectations indeed translate into upward mobility? Are the native children of immigrants more educated than immigrants generally? Are they more educated than their parents? Answering these questions is not as straightforward as might appear; several approaches can be used.

A common but dubious approach consists in comparing education levels of immigrants and the children of immigrants in a cross-sectional perspective, as is done in Table 2.5. In this example, the offspring of immigrants does not actually correspond to the children of the immigrants taken into account in the table. For instance, in the TeO Survey, only one immigrant of ten coming from African countries surrounding the Gulf of Guinea (e.g. Benin, Congo, Ivory Coast) had a child or children who could be included in the sample, i.e. children born in France and over 18 years old at the time of the survey (Beauchemin, Lhommeau, and Simon, 2015). As a result, some groups of native offspring seem to be less educated than immigrants of the same origin (Table 2.5). This should not suggest that there is a downward assimilation trend (Moguérou, Brinbaum, and Primon, 2010). Actually, it instead reflects compositional changes in migration flows. For instance, the very high proportion of individuals with a higher degree among sub-Saharan migrants reflects the fact that African migration has recently become very selective. But these newly arrived and highly educated migrants are not the parents of the offspring of immigrants of the same origins included in the survey.

Table 2.5. Immigrants and immigrants' offspring in France with a tertiary degree

By gender and origin, not in education at the time of the survey, aged 18-50, percentages

	Immigrants		Offspring of immigrants	
	Men	Women	Men	Women
Algeria	25	22	18	22
Morocco and Tunisia	27	22	27	34
Sub-Saharan Africa	37	18	26	35
Southeast Asia	31	28	47	49
Turkey	10	9	17	14
Portugal	5	9	20	38
Spain and Italy	23	39	23	30
Both groups - All origins	28	29	25	33
Mainstream population	32	37	32	37

Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Figures excerpted from Tables 1 and 4 of (Moguérou, Brinbaum and Primon, 2010). Weighted results.

Table 2.6 offers a more realistic view of intergenerational mobility by comparing the level of education of the native children of immigrants with their actual parents. Here, as expected, immigrants' children of all groups are significantly more educated than immigrants, with a high correlation between their respective education levels (a

coefficient of 0.83 – see Figure 2.3). The pace of this upward educational mobility varies by origin. In groups dotted below the correlation linear regression line, the offspring of immigrants have reached an education level that exceeds what could have been expected considering their parents' level. Children of immigrants from Southeast Asia exemplify this quick upward mobility. But those from Portugal, Morocco and Tunisia also moved very rapidly along the educational ladder. On average, immigrants' children of all these groups experienced a quicker educational mobility than the mainstream population. On the other hand, groups dotted above the regression line lag behind: considering the education level of their parents, the children should be more educated. This is the case for the children of only two groups: the least educated group of immigrants (Turks) and the most educated one (Central Africa and Gulf of Guinea). Both cases could raise some concern, although for different reasons. Children of Turkish immigrants socially regress while their parents are already at the bottom of the educational scale, putting them at risk of a longstanding socio-economic exclusion. The downward integration of the sub-Saharan migrants' children could be interpreted as a strong factor of perceived exclusion in this population and a socio-economic waste for the country.

Table 2.6. Share of immigrants' children and their two parents holding at least an upper secondary degree

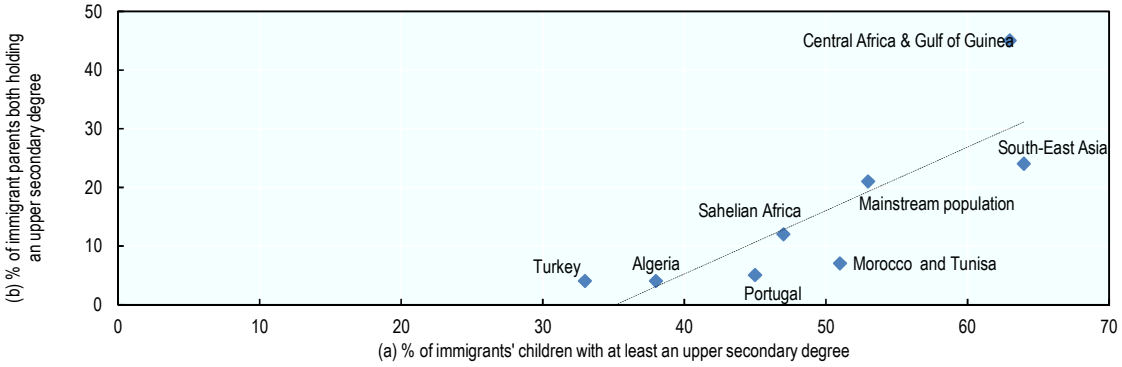
Individuals aged 18-35, not in education at the time of the survey, percentages

	(a) % of immigrants' children with at least an upper secondary degree	(b) % of immigrants' children with 2 parents who hold an upper secondary degree
Algeria	38	4
Morocco and Tunisia	51	7
Sahelian Africa	47	12
Central Africa and Gulf of Guinea	63	45
Southeast Asia	64	24
Turkey	33	4
Portugal	45	5
Mainstream population	53	21

Notes: 38% of the children of Algerian immigrants have at least an upper secondary degree. And among 4% of them, both the mother and the father have such a degree.
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. (a) Figures excerpted from Tables 1 and 4 of Moguérou et al., 2010. (b) Figures excerpted from Table A of Brinbaum and Primon, 2013. Weighted results.

Figure 2.3. Correlation between the educational attainment of immigrants and their children

Ages 18-35, not in education



Notes: The dotted line indicates the regression coefficient (0.83) between the education levels of immigrants' children and their two parents. In groups dotted below the regression line, the offspring of immigrants reached an education level that exceeds what could have been expected considering their parents' level. Groups dotted above the regression lag behind their parents' education: considering the education level of their parents, the children are expected to be more educated.
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. (a) Figures excerpted from Tables 1 and 4 of Moguérou et al., 2010. (b) Figures excerpted from Table A of Brinbaum and Primon, 2013. Weighted results.

However, upward mobility might not be as pervasive as it seems in Table 2.6. Males and females might in fact experiment with different patterns of educational evolution. Without giving any detail relating to origin, Mainguené (2014) shows for example that upward educational mobility is less frequent among daughters of immigrants than among those of natives (Table 2.7). In any case, for both genders, further research is still needed to analyse the factors explaining upward or downward trajectories at the group and individual level.

Table 2.7. Education levels of native daughters and their mothers

By origin, women aged 18-50 having ended their studies in 2008, percentages

		Education level of the mother			
		No diploma / level inferior to the bac	Bac	Bac + at least 2 years	All
Native women with an immigrant mother					
	No diploma / level inferior to the bac*	51	42	17	47
	Bac*	20	16	23	20
	Bac* + at least 2 years	29	42	60	33
All		100	100	100	100
Women in the mainstream population					
	No diploma / level inferior to the bac*	46	43	17	42
	Bac*	23	13	17	21
	Bac* + at least 2 years	31	44	66	37
All		100	100	100	100

Note: The bac (*baccalauréat*) is the diploma obtained in France at the end of secondary school. It is a prerequisite to enter university.
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Excerpted from Mainguené, 2014. Weighted results.

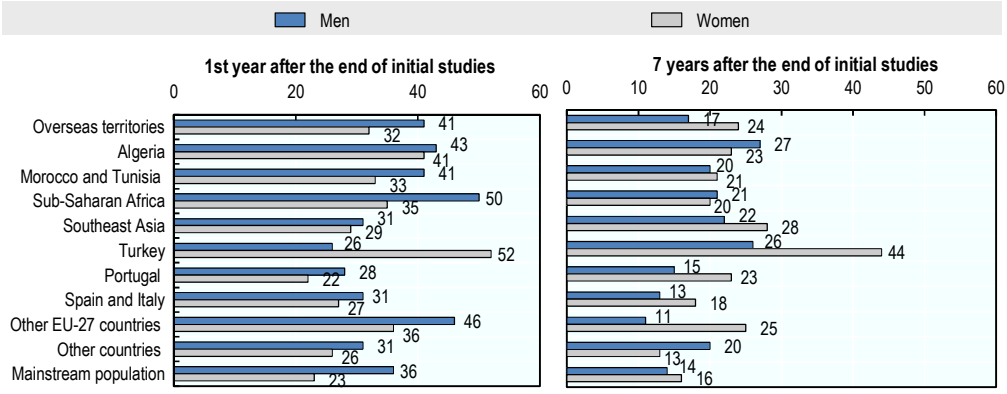
Employment and socio-economic mobility

From school to work: The segmented access to employment of children of immigrants

Unemployment during the first year following completion of initial studies varies notably by gender and origin. The male disadvantage observed at school translates into much higher probabilities to be unemployed among men than among women during the first year after the end of studies (Figure 2.4). Sons of African immigrants experience dramatic levels of unemployment: 50% of those of sub-Saharan descent were unemployed at this point and the proportions were 43% and 41% respectively among those of Algerian and Moroccan-Tunisian descent. In contrast, despite a low level of education, Turkish men are very quick to find employment, as are men of Portuguese origin. The latter even enter the labour market more quickly than men in the mainstream population. This reflects educational strategies oriented towards professional tracks leading to jobs in ethnic niches and family businesses, e.g. construction and trade (Domingues Dos Santos, 2005).

Figure 2.4. Unemployment rates one and seven years after the end of initial studies

Children of immigrants aged 18-50 who declared they were active, i.e. in employment or searching for employment after they finished their studies, percentages



Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Adapted from Table 8 of Brinbaum, Meurs and Primon, 2015. Weighted results.

Women with Turkish parents stand out as displaying a particularly large unemployment gap to their male counterparts. They are the only ones among all groups to experience higher unemployment than men of similar origin (52% against 26%). Their level of unemployment is more than twice the mainstream women's one (52% against 23%). Immigrants' daughters are more frequently unemployed than their mainstream counterparts in all groups except those with Portuguese parents. Again, those of African descent appear to be more vulnerable in the labour market.

Differences by origin in terms of unemployment are not only explained by lower educational outcomes. Indeed, multivariate results show that significant differences persist once education, social origin and demographic characteristics are controlled for (Table 2.8)[4]. In other terms, this result suggests that the educational premium of the daughters of immigrants paradoxically becomes a disadvantage: while they outperform the mainstream population at school (Table 2.3), they are more likely to be unemployed at the end of their studies (Table 2.8). This result supports the hypothesis that daughters of extra-European immigrants experience, upon entry in the labour market, a double discrimination because of both their origin and their gender. In other words, when they transition from the educational system to the labour market, they seem to lose the positive stereotypes they benefited from in the education system (Frickey and Primon, 2010).

Over time, unemployment levels decrease, although following paths that differ by origin and gender (Figure 2.4). Across groups, the reduction of unemployment is much more significant for men than for women. As a result, in each group, the gender gap tends to fade away and, in some groups, even morph into disadvantage (as in European groups). Seven years after the end of their initial studies, sons of immigrants from Africa (including Maghreb) and Asia (including Turkey) keep levels of unemployment that exceed 20%. Multi-variate analyses show that the penalty experienced by sons of Maghrebi students, when compared to the mainstream population seven years after having completed their studies, is not simply due to their education level, their social origin and other individual characteristics (Table 2.8). Differences between women of the same origin and those of the mainstream population are no longer statistically different at this point in time. This finding

could suggest a slow integration into the labour market and/or a tendency to withdraw from the labour market, meaning that seven years after the entry in the labour market only the more successful women remain (Meurs, Pailhé, and Simon, 2006; Meurs and Pailhé, 2010). Unfortunately, so far the literature is not clear enough to disentangle these two possible and somehow contradictory processes. There is however some evidence that daughters of extra-European immigrants are more frequently inactive than mainstream women, even though they are much less likely to be inactive than their parents, e.g. 13% vs. 28% among those of Algerian origin, against 8% in the mainstream population (Brinbaum et al., 2015, p. 209).

Table 2.8. Odds ratios of experiencing unemployment

Children of immigrants aged 18-50 who declared they were active, i.e. in employment or searching for employment after they finished their studies, 2005 or before for column (1) and 2002 or before for column (2)

	(1) Odds of having experienced unemployment during the first year of active life		(2) Odds of having experienced at least one year of unemployment during the first seven years of active life	
	Men	Women	Men	Women
Mainstream population (ref.)	1.0	1.0	1.0	1.0
Overseas territories	1.1	1.7***	0.8	1.7**
Maghreb	1.2*	1.6***	1.5**	1.2
Europe	0.9	1.2	0.9	1.2*

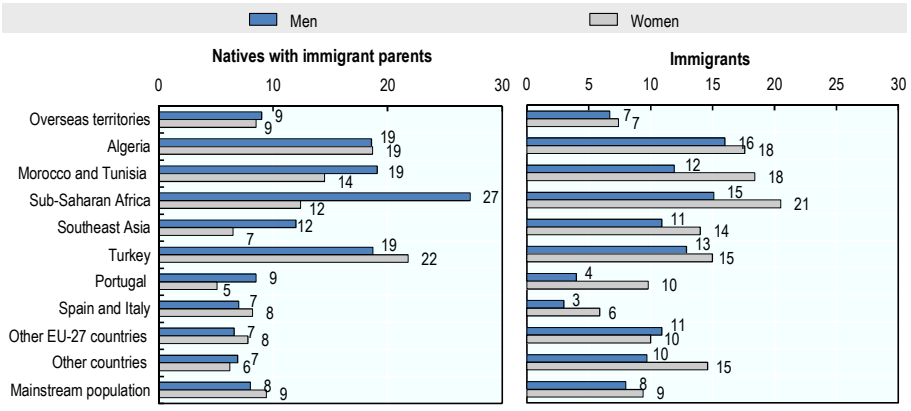
Note: Each column corresponds to a separate logit model. For each, control variables are the following: parents' country of origin, citizenship, age at the time of the survey, education (level and domain), number of siblings, parents' characteristics (education level, socio-economic status), and place of residence at 15. Statistical significance is indicated with *** 10%, ** 5%, and * 1%.
Interpretation: Values between 0 and 1 indicate a negative effect of origin on the probability of experiencing unemployment compared to the mainstream population. Values above 1 indicate a positive effect, i.e. a higher probability of experiencing unemployment compared to the mainstream population.
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Adapted from Tables 9 and 10 of Brinbaum, Meurs and Primon, 2015.

Unemployment, salaries and discrimination: A cross-sectional comparison of immigrants and the offspring of immigrants

Comparing immigrants' children with immigrants strikingly confirms the disadvantage of male natives whose parents originate from outside Europe. Among all immigrant groups with African origins, immigrants' sons are more frequently unemployed than the immigrants themselves, with a notable peak among those of sub-Saharan origin (Figure 2.5). As immigrants in these figures are not necessarily the parents of the children in question, this comparison cannot be strictly interpreted in terms intergenerational mobility. It does however provide striking insights into the socio-economic position of natives with immigrant parents in France.

Figure 2.5. Unemployment among immigrants and native offspring of immigrants

By Gender, active and inactive individuals aged 18-50 in 2008, percentages



Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Figures excerpted from Tables 1 and 3 of Brinbaum, Meurs et Primon, 2015. Weighted results.

Multivariate analyses show that demographics, family situation and social handicaps (education level, social origin, place of residence, health, etc.) together explain most of the high levels of unemployment. But significant differences by origin persist. After controlling for socio-economic factors, sons of Maghrebi immigrants remain more disadvantaged than the immigrants themselves, even though they were born, educated and socialised in France. Before controlling for socioeconomic characteristics, the probability of being unemployed is eleven points higher among immigrants' sons than in the male mainstream population (19% vs. 8% in Figure 2.5), while the gap is "only" four and eight points for Moroccan-Tunisian and Algerian immigrants respectively. After controlling for socio-economic factors, the disadvantage of Maghrebi immigrants' sons diminishes but remains: Their probability of being unemployed is still five points higher than the probability of their counterparts of the mainstream population (vs. four points for immigrants, Table 2.9). In contrast, native-born daughters of Maghrebi parents do better than immigrants. All in all, men born in France from Maghrebi parents underperform both men who were born in the Maghreb and daughters of the same origin.[5] Although these results do not properly reflect intergenerational mobility, they do suggest that there might be reverse trends for males and females, with the former experiencing a socio-economic downgrading and the latter, on the contrary, experiencing an upgrading.

Table 2.9. Probability to be unemployed

Immigrants, native children of immigrants and mainstream population, active and inactive individuals aged 18-50 in 2008, percentage points

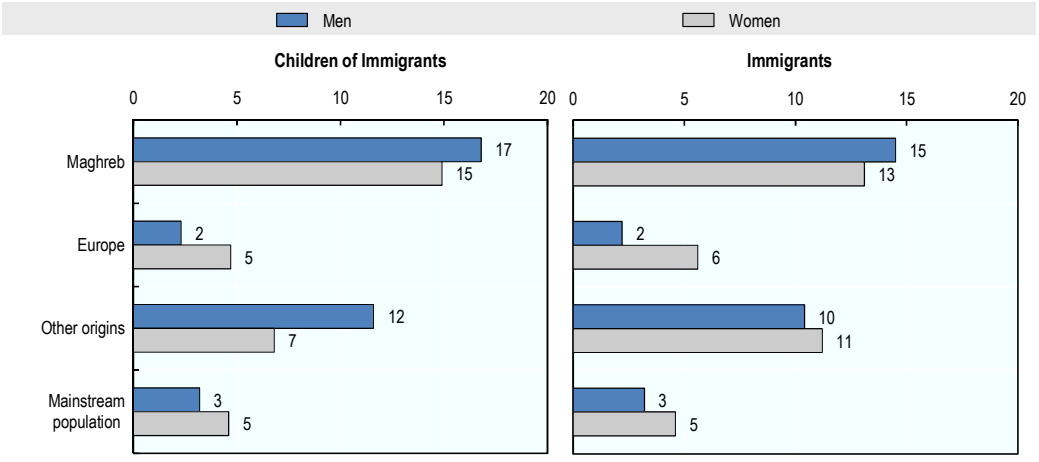
	Men	Women
Mainstream population (ref.)	0.0	0.0
Immigrants and children of immigrants - Overseas territories	-1.6	+0.1
Immigrants - Maghreb	+4***	+6***
Immigrants - Europe	-2.7	+0.3
Immigrants - Other origins	+2.1	+4***
Children of immigrants - Maghreb	+5***	+4***
Children of immigrants - Europe	-2.2	-2.1
Children of immigrants - Other origins	+2*	+1.5

Notes: Control variables are: age, education level, health, parents (mixed couple, origin), family situation (children, partner in employment), place of residence (region, "sensitive urban zones"), driving licence.
Interpretation: After controlling for socio-demographic background, the average probability of being unemployed is 5 percentage points higher for the male sons of Maghrebi immigrants than for men in the mainstream population.
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Adapted from Tables 2 and 4 of Brinbaum, Meurs and Primon, 2015. Weighted results.

To what extent are the inequalities experienced in the job quest by the children of immigrants from outside Europe due to discrimination? At first sight, the groups who experience the higher penalties in matters of access to employment are also those who are more likely to declare they suffered from unfair treatment in the labour market. The Maghrebi case is especially telling: Male children of immigrants lead in discrimination declarations, with a level that exceeds declarations of their female counterparts and those of both male and female immigrants of the same origin (Figure 2.6). Such a coincidence at the group level is not sufficient to clearly attribute difficulties in the labour market to employers' discriminatory practices. To explore the relationship between the two phenomena in more detail, Meurs discussed whether the actual probability of being unemployed is correlated – at the individual level – with the experience of discrimination, as reported by the interviewees (Meurs, 2017; Brinbaum, Meurs and Primon, 2015). Her results show that the people who are usually expected to be in employment (i.e. the people who have all characteristics that usually guarantee access to employment) but who are actually unemployed are also those who declare they suffer from unfair treatment in their search of a job. In other words, there is a strong correlation at the individual level between the objective measure of employment inequalities and subjective measures of discrimination.

Figure 2.6. Self-reported discrimination in the labour market

By gender and origin, immigrants, native-born children of immigrants and mainstream population, active and inactive individuals aged 18-50, percentages

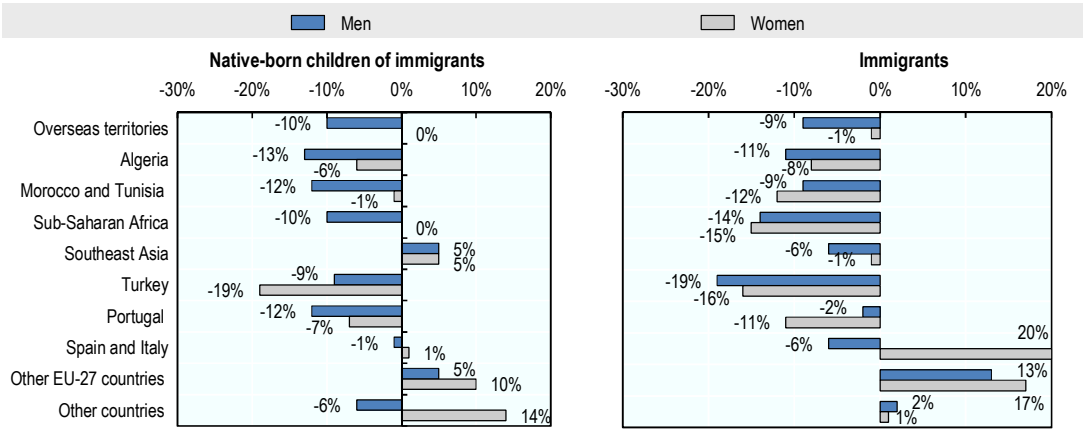


Notes: Percentage of people who answered "yes" to at least one of the following questions, for a motive corresponding to one of those set down by the French law prohibiting discrimination: "During the past five years, were you ever unjustly refused employment? Have you ever been unfairly refused promotion? Been laid off unfairly?"
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Adapted from Table 5 of (Brinbaum, Meurs and Primon, 2015). Weighted results.

Once in employment, do the offspring of immigrants experience a salary penalty when compared to the mainstream population? Is this potential penalty higher or lower than in their parents' generation? A first look at Figure 2.7 reveals distinct negative gaps in terms of salaries for most groups of immigrants and immigrants' native offspring compared to the mainstream population. Yet again, results differ markedly by gender and origin. The salary gap for the female offspring of immigrants is generally narrower than for immigrants themselves, except for those of Turkish origin where immigrants' daughters experience the largest negative gap with close to 20% lower salaries than the mainstream population. On the other hand, among men, no clear pattern emerges from the comparison between immigrants and their offspring. Sons of immigrants from sub-Saharan Africa, Southeast Asia, Turkey, Spain and Italy have smaller salary gaps than immigrants, while those of other origins have higher gaps (Figure 2.7).

Figure 2.7. Differences in hourly salaries by comparison with the mainstream population

Immigrants and the native-born children of immigrants, percentages



Notes: The hourly salary of sons of Algerian immigrant(s) is inferior by 13% to the hourly salary of men in the mainstream population.
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Reproduced from Figure 3 in (Brinbaum, Meurs, and Primon, 2015). Weighted results.

To what extent are the differences observed between immigrants and the children of immigrants attributable to compositional effects, i.e. to the fact that these populations have different characteristics? Based on the Oaxaca-Blinder decomposition technique, Table 2.10 shows what part of the salary difference between each group and the mainstream population can be attributed to individual characteristics, employment characteristics, or unexplained factors (Meurs, Lhommeau, and Okba, 2015). The effects of these three sets of characteristics are reviewed below, with the focus on the most vulnerable groups, i.e. men and women of Turkish, sub-Saharan and Maghrebi origin. First, in all groups, occupational segregation plays a major role in explaining wage gaps. That is to say, men and women from both groups – immigrants and the children of immigrants – are concentrated in less favourable jobs, a finding in line with results from previous studies (Aeberhardt and Pouget, 2010; Aeberhardt et al., 2010). Second, the effect of personal characteristics (age, educational attainment, place of residence, etc.) is less homogenous across groups. They have virtually no effect on male immigrants, but explain a significant part of the salary gap for other groups (male children of immigrants, female immigrants, and women with immigrant parents). Finally, once compositional effects are taken into account, differences with the mainstream population shrink among women,[6] but unexplained wage discrepancies remain significant among men. Other things being equal, immigrants from sub-Saharan Africa, the Maghreb and Turkey still earn around 6% less than the mainstream population. The discrepancy amounts to 3% for the children of immigrants.[7]

Table 2.10. Oaxaca-Blinder decomposition of estimated hourly salary differences for immigrants and the children of immigrants by comparison with the mainstream population

Individuals in salaried employment aged 18-50

	Men				Women			
	Observed difference	Difference explained by…		Unexplained difference	Observed difference	Difference explained by…		Unexplained difference
		individual characteristics	job characteristics			individual characteristics	job characteristics	
Immigrants - Maghreb	0.109	-0.002	0.054***	0.057***	0.123	0.024***	0.09***	0.009***
Immigrants - Europe (EU 27)	-0.018	-0.008***	0.032***	-0.041***	-0.032	-0.005***	0.023***	-0.05***
Immigrants - Other origins	0.106	-0.022***	0.072***	0.056***	0.096	0.015***	0.083***	-0.001
including sub-Saharan Africa and Turkey	0.164	-0.003*	0.106***	0.061***	0.161	0.036***	0.112***	0.013***
Children of immigrants - Maghreb	0.125	0.026***	0.062***	0.037***	0.041	0.017***	0.028***	-0.004
Children of immigrants - Europe (EU 27)	0.02	0.002*	0.014***	0.004**	0.003	0.003***	0.01***	-0.01***
Children of immigrants - Other origins	0.082	0.025***	0.026***	0.032***	0.008	0.015***	0.015***	-0.023***
including sub-Saharan Africa and Turkey	0.13	0.04***	0.063***	0.027***	0.062	0.039***	0.05***	-0.027***
Both groups - Overseas territories	0.096	-0.007***	0.04***	0.063***	0.008	-0.011***	0.009	0.01***

Notes: Separate models for men and women. For each model, individual characteristics include age, educational attainment, place of residence, professional experience, health, and – for immigrants only – age upon arrival in France. Employment characteristics include duration in current employment, public vs. private sector, number of employees and current socio-professional job category.
Without controlling for observed differences, the sons of Maghrebi immigrants receive an hourly salary inferior by 12.5% to the hourly salary of men born to French natives (the mainstream population being the reference group). Employment characteristics explain 6.2 points of the observed difference. Individual characteristics account for 2.6 points of the gap. Finally, 3.7 points of the difference remain unexplained by individual or employment characteristics. Statistical significance is indicated using * 10%, ** 5%, and *** 1%.
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Adapted from Table 3 of Meurs, Lhommeau and Okba, 2015.

How can this significant yet unexplained salary "penalty" observed for men be interpreted? To what extent can it be attributed to employers' discriminatory attitudes or unobserved heterogeneity? Following the same method as the one used to study the role of discrimination in access to employment, Meurs (2015) analysed, at the individual

level, the relationship between observed salary gaps and self-reported declarations of unfair treatment.[8] She first estimated the wage that each individual would receive if they were paid as much as an individual of the mainstream population with the same characteristics. The difference between this theoretical wage and the actual wage of each individual was then used as an independent variable in a logistic regression explaining the declaration of unfair treatment, controlling for all variables used to estimate the theoretical salary. In other words, the analysis allows measuring, other things being equal, the extent to which the difference between the theoretical and actual salaries is explained by the self-reported experience of discrimination. Results show that the odds of declaring unfair treatment increase significantly with the gap between the theoretical and actual wages. This shows that self-reported discrimination is anchored in observed wage inequalities. It also suggests that the unexplained wage penalty can – at least partially – be interpreted in terms of discrimination.

Intergenerational socio-economic mobility

Although previous results compare immigrants and the children of immigrants, they do not properly address the question whether sons and daughters of immigrants experienced a downward or upward socio-economic mobility compared with their own parents. As already discussed in the section on education, that type of comparison is not easy to carry out. At least two methodological limitations need to be mentioned concerning social mobility. The first is that the socio-economic statuses of two successive generations (the children and their parents) are not really comparable because of the changes in the labour market structures. Typically, being a manual worker around 2010 obviously does not have the same meaning, in terms of social position, as it did in the early 1960s. The second limitation relates to the participation of women in the labour market. Among immigrant mothers, especially those whose origins are outside Europe, inactivity was and is still frequent,[9] which hinders the possibility of comparing the socio-economic status of daughters with their immigrant mothers. Three approaches have been used to address these limitations in measuring social mobility.

Mainguené's approach (2014) consisted in limiting the analyses to immigrants' daughters whose mothers were active. As this approach significantly reduces the population size, results cannot be disaggregated by origin. They do however offer a first insight into the social mobility of the daughters of immigrants. The diagonal boxes in Table 2.11 show the proportion of daughters who maintained their mothers' social position. Above the diagonals are those who experienced a downward mobility; below those who experienced an upward mobility. The matrix reveals mixed results. On one hand, remaining in the low qualification level category is more common among the daughters of immigrants than among the daughters of natives (17% vs. 12%). On the other hand, upward mobility happens more frequently among immigrants' daughters (a total of 46% vs. 37%), although the type of mobility varies by origin. While moving to the highly qualified category from the medium category is less frequent among the daughters of immigrants (7% vs. 10%), moving from low to medium happens more often among immigrants' daughters than among daughters of native French (35% vs. 23%). This probably reflects the fact that immigrant mothers are more concentrated in the lower qualified group, making it more likely for their daughters to move out from this category. Moving upwardly is less likely when the starting point is already a higher position, which is more common among natives born to natives. In any case, the major drawback of this approach comparing daughters and their mothers is that it says nothing about the social mobility of women who had an inactive mother. And, as inactivity is quite common in groups

originating from outside Europe, these aggregated results actually reveal very little about the social mobility of daughters of extra-European immigrants.

Table 2.11. Socio-professional category of mothers and daughters

By origin, active women aged 18-50 who ended their studies in 2008 and whose mothers were active when they were 15, percentages

		Socio-economic status of the mother			
		Low	Medium	High	All
Daughters of immigrants					
	Low	**17**	6	1	24
	Medium	35	**28**	1	64
	High	4	7	**1**	12
	All	56	41	3	100
Daughters of natives					
	Low	**12**	9	-	21
	Medium	23	**38**	3	64
	High	4	10	**1**	15
	All	39	57	4	100

Notes: Numbers in bold indicate cases of social immobility. Above diagonal boxes: downward mobility. Below diagonal boxes: upward mobility. For example, 4% of daughters whose immigrant mothers had a low socio-economic status but achieved themselves a high socio-economic status.
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Excerpted from Mainguené, 2014. Weighted results.

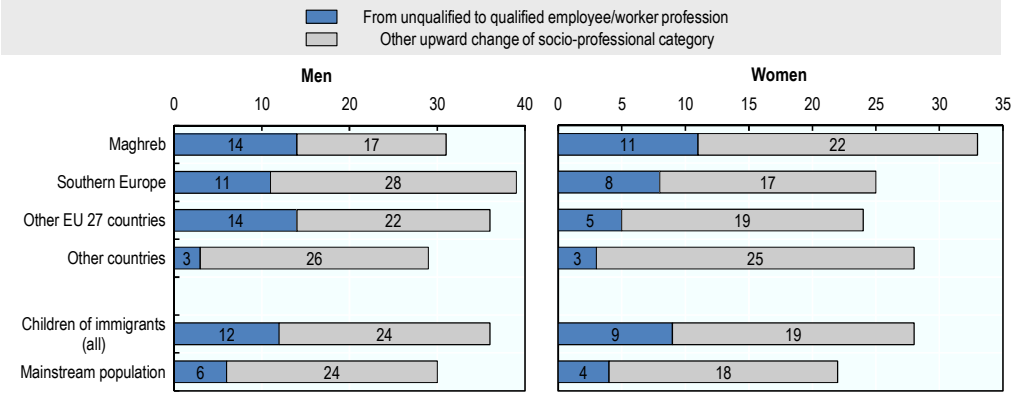
An alternative approach was adopted by Okba (2012): as a reference point to measure social mobility, he used the fathers' socio-economic status for both immigrants' sons and daughters. This choice allowed him, to a certain extent, to disaggregate results by origin (Figure 2.8). The results both confirm and expand what had been observed for mothers and daughters by Maiguené (2014). First, upward mobility is generally higher among children of immigrants than in the mainstream population; that trend is observed for both women and men, whatever the origin. Again, this might be explained by the lower position of immigrant fathers on the social ladder: starting from the bottom, it is easier to move upward. Second, the immigrants' children's social mobility needs to be tempered, as it is largely due to changes within the employee/worker category. Social moves to higher socio-professional categories are proportionally rarer than in the mainstream population. In other words, natives with immigrant parents do progress on the social ladder, but climb fewer steps than natives born to natives. Third, looking at gender differences, the relative success of Maghrebi immigrants' daughters is especially striking: the proportion experiencing upward mobility is higher than those of all other women groups and that of men of the same origin. Conversely, results point to the social disadvantage of sons of Maghrebi immigrants, who have lower outcomes than their sisters and European counterparts.

Okba analysed the factors explaining upward mobility. He showed that the fathers' country of origin has virtually no effect on the probability of upward movement, as such a social move is essentially determined by socio-demographic variables. The probability of moving upward increases with the father's socio-economic status, the mother's activity status, and the person's own education level and age. They are reduced for individuals who experienced an interruption in their career and for women. As interactions were not

tested between origin and other variables, it is not known to what extent the factors facilitating or hindering upward mobility vary by origin among the children of immigrants.

Figure 2.8. Socio-professional upward mobility of native-born children of immigrants

By gender and father's origin, ages 35-50, percentages



Notes: - The figure includes only individuals in salaried employment or with previous work experience at the time of the survey. - Socio-professional mobility is measured by comparing the fathers' socio-professional category when their children were 15 years old with the socio-professional category of their children in their most recent job. Changes measured used the following categories: unqualified employee/worker, qualified employee/worker, intermediate profession, managerial and professional occupation. - Southern Europe includes Portugal, Spain and Italy.
Interpretation: In their last employment, 36% of the children of immigrants had experienced upward social mobility, i.e. they were employed in a more qualified job than their fathers. 12% experienced upward mobility within the employee/worker category (from an unqualified to a qualified job), while 24% had moved upwardly from and to any of the other categories (e.g. from the unqualified employee/worker category to intermediate category, or from this latter category to a managerial occupation, etc.).
Source: Trajectories and Origins Survey (TeO), INED-INSEE, 2008. Adapted from Table 8 of Meurs, Primon and Okba, 2015. Weighted results.

The two approaches (Mainguené's and Okba's) described above have two limitations in common. The first is that they measure social mobility through changes in overly large categories. More precise measures of the socio-economic status, such as the International Socio-Economic Index (ISEI), could temper the conclusions. The second is that the intergenerational mobility is measured without taking into account the fact that parents and children do not share the same labour market or socio-economic contexts. Taking into account their relative position could also modify the results, as was observed above for education. (Attias-Donfut and Wolff, 2009) explored another approach, consisting in analysing subjective answers given by parents about their children's social mobility in a survey exclusively dedicated to immigrants aged 45-70 (Table 2.12). The pervasive view of immigrants in 2003 was that their children experienced social ascension by comparison with themselves (59% for sons and 61% for daughters), a view that was shared by only a third of the native population ten years earlier, according to a previous survey that included this population (Attias-Donfut and Wolff, 2009, 264). This view depends on parents' geographic and social origin. By definition, the children who have parents with the highest positions cannot experience upward mobility. This is probably why, for instance, only a third of the sons of Northern European origin were considered as having socially progressed, with another third being viewed as occupying a similar social position. Conversely, immigrants with lower social positions have a more optimistic view

of their children's social mobility. Social mobility again appears as a gendered phenomenon. Except among those of Turkish origin, immigrants' daughters are less frequently involved in a downward social trajectory than sons. This disadvantage men have in relation to women is especially salient among those originating from the Maghreb and sub-Saharan Africa. Importantly, the same handicap persists in multivariate analyses that control for personal and parents characteristics (Attias-Donfut and Wolff, 2009, 268).

Table 2.12. Parents' view of their children's social mobility

Immigrants' children, aged 25 and over, percentages

	Sons				Daughters			
	Upward	Stable	Down-ward	Don't know	Upward	Stable	Down-ward	Don't know
Northern Europe	36	37	20	8	35	43	16	6
Eastern Europe	62	22	10	5	68	18	10	4
Southern Europe	61	26	8	5	60	27	8	5
Maghreb	60	21	12	7	65	21	9	5
Sub-Saharan Africa	60	16	12	12	62	21	9	8
America	54	20	15	11	53	38	2	6
Turkey and Middle East	64	26	8	1	68	21	10	1
Asia	62	24	8	6	60	25	8	7
All	59	24	11	6	61	25	9	5

Notes: 36% of the sons of immigrants from Northern Europe are viewed by their parents as having experienced upward mobility, 37% are perceived as being in a similar social position, 20% are seen as having experienced a social decline, and 8% are not categorised by their parents.
Source: CNAV PRI (Caisse nationale de l'assurance vieillesse / passage à la retraite des immigrés) 2003, adapted from Table 5 of Attias-Donfut and Wolff, 2009.

Summary and conclusion

The results presented in this chapter demonstrate that upward mobility is not evenly distributed among the children of immigrants. In addition to origin, gender is a crucial variable to take into account. Merging figures for men and women in the analyses obscures the fact that they actually have opposite outcomes, especially among children of immigrants from outside Europe. Among men, those of African descent (either from the Maghreb or sub-Saharan Africa) repeatedly appear in a position of social inferiority when compared to both their fathers and sisters. Their initial disadvantage at school is massive, with about a third lacking a secondary diploma, which hampers their opportunities for socio-economic integration for the rest of their life. This has lasting negative economic consequences for the country (for instance, in terms of unemployment), as well as social consequences as these inequalities foster feelings of alienation. These results call for significant public efforts, on one hand, to reduce inequalities in the early education stages to avoid repeating these inequalities in the future and, on the other hand, to foster "catch up" education programmes to offer socio-economic integration opportunities to those who already dropped out of school without credentials.

In fact, a "gender reversal" can be observed from immigrants to the native children of immigrants. Among immigrants, women are disadvantaged in all respects. But among the children of immigrants, women are on average better off than men. School, especially at

the early secondary level, is the key moment when this reversal happens. Daughters of immigrants benefit from positive stereotypes in the education system. Upon entry into the labour market, this advantage disappears: they lag behind in finding a job. More research is needed to better understand this unexpected disadvantage, even though, once in employment, they are again less disadvantaged than their male counterparts, at least in terms of salaries.

This intergenerational gender reversal does not apply to sons and daughters of Turkish migrants. While the results suggest that gender and ethnic differences between the mainstream population and the children of immigrants diminish with the diploma level, children of Turkish immigrants (both sons and daughters) are the only ones with higher odds than the mainstream population of not obtaining the final diploma of secondary school (the *baccalauréat*). This school disadvantage translates into a significant handicap in the labour market for women, who have extraordinarily high levels of unemployment and whose salaries are even inferior to those of Turkish immigrant women. Despite a similar educational handicap, sons of Turkish immigrants do better in the labour market, both compared to women of same origin and to men of other groups. Although more research is needed to better understand their economic integration, some evidence suggests that their relative success could be linked with involvement in family businesses. This would protect them from discrimination in the labour market.

For the rest, discrimination – including the perception thereof – appears to be a major factor behind the difficulties experienced by native male children of immigrants from outside Europe. At school and work, they report unfair treatment much more often than do women of similar origins. Detailed analyses have shown that, in matters of both unemployment and salaries, there is a high correlation between these declarations and the objective situation of the persons. Qualitative research has further highlighted frequent instances of discrimination and negative stereotyping at school, particularly affecting native males with origins outside Europe (Lorcerie, 2011). This can reinforce feelings of alienation.

Diagnosing patterns of socio-economic mobility in migrant families is not an easy task. In existing studies, more often than not, immigrants' children are compared to the children natives and/or immigrants in a cross-sectional perspective. These analyses yield important insights on the social position of the offspring of immigrants, but say little about intergenerational mobility per se. Few studies have tackled this specific subject, and most that have do not analyse in detail the mechanisms through which immigrants' children progress (or not) on the social ladder. More research is needed to identify the barriers and opportunities for social mobility; this goes beyond merely understanding how and why an initial parental disadvantage is transmitted to the children. The results presented here further call for research to help understand how and why for some groups of immigrants, the socio-economic gaps faced by their children are even larger than those faced by the immigrant parents themselves. This becomes evident, for example, in the salary gaps experienced by the children of Turkish immigrants. Success stories also need to be studied, in order to identify the factors that encourage upward mobility.

This chapter shows that taking into account the heterogeneity of the native children of immigrants is crucial to producing an accurate social portrait. Men and women on one hand, and children of European and non-European immigrants on the other hand, often have opposite outcomes. These categories are minimal distinctions to be made in further analyses. They are especially relevant in understanding the role of discrimination in the social trajectories of the children of immigrants. To that end, collecting data allowing

identification of whether individuals are or are not the children of immigrants is crucial. Furthermore, as the next generation of native children with origins outside Europe becomes a significant group in France, intergenerational mobility studies could be extended to these grandchildren of immigrants. In cases where the children of immigrants experienced downward social mobility compared to their parents, is there a rebound at the next generation? Or are certain groups and individuals on a trajectory of enduring marginalisation? Following up on the results presented in this chapter is the objective of the next round of the Trajectories and Origins Survey, due for data collection in 2019-2020.

Notes

1. This is not equivalent to a dropout rate as students who do not obtain the BEPC are allowed to pass in upper secondary schools.

2. This Turkish exception may be due to an early orientation towards vocational tracks, with students finding a job in the wake of their internship and dropping out of secondary school without passing the *baccalauréat*.

3. In France, as a result of the "college unique" policy, the school's orientation of the student toward a vocational track can begin at the end of the lower secondary level.

4. Results presented in this table allow solely to see whether inequalities remain after controlling for the social background of immigrants' children. Unfortunately, the odds ratios of the independent variables are not published. In further analyses, it would be interesting to introduce interactions between origin and social background. That would help to understand whether, for instance, having less educated parents places the children of immigrants from outside Europe at a disadvantage not shared by the offspring of native-born parents.

5. It is not known whether differences between immigrant men from the Maghreb and the native French daughters of Maghrebi immigrants are statistically significant.

6. The female offspring of immigrants even receive more than the mainstream population. The negative unexplained difference observed among them means that they tend to receive salaries that are higher than what they would usually be expected to receive considering their characteristics. This can be explained by the protective role of the SMIC (i.e. the official minimum salary in France).

7. Note that these gaps remain when selection into employment is taken into account (i.e. when controlling for the fact that individuals in employment may have characteristics that differ from those who are not employed). For detailed results, see Meurs et al., 2015.

8. The two questions asked of respondents were: "During the past five years, have you ever been unfairly refused promotion? Been laid off unfairly?"

9. For instance, according to TeO data, only 23% of the daughters of Maghrebi immigrants had an active mother when they were 15 years old; the proportion was 51% among all immigrant mothers and 62% in the mainstream population (Mainguené 2014).

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Chapter 3. Germany: Intergenerational inequalities in the education system and the labour market for native-born children of immigrants from Turkey and the former Yugoslavia

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The chapter begins with a brief demographic sketch of Turkish and Yugoslav immigrants and their offspring in Germany based on data from 2012. It then describes their situation in the education system and in the labour market in 2000 and in 2012. In doing so it assesses how immigrant-native gaps vary across generations and over time, with separate analyses for men and women. The discussion explores the factors triggering intergenerational progress and change, exploring the extent to which a lack of educational attainment results in later disadvantage in the labour market. The most prevalent approaches to explaining group-specific trajectories are presented, with the focus on the ongoing disadvantage for those of Turkish descent. Factors other than educational attainment are also explored, namely by addressing the most important results from existing studies on the role of language skills, social ties and ethnic discrimination.

Main findings

- Generational progress in educational attainment can be found for the native-born children of both Turkish and former Yugoslav immigrants. Although 50% of female and about 30% of male Turkish immigrants born abroad did not possess any educational degree, less than 10% of their native-born children had left school without any diploma in 2012. The educational levels of Yugoslav immigrants and their children are relatively higher than those of Turkish immigrants and their offspring.
- Over time, the share of Turkish immigrant women holding no educational degree whatsoever has increased and indeed was higher in 2012 (49% among women) than it was in 2000 (33% among women). This finding most likely reflects ongoing marriage migration of Turks with low levels of education and is likely to influence the intergenerational mobility patterns observed among the offspring of Turkish immigrants.
- Almost every fourth child of Yugoslav immigrants and every fifth of Turkish immigrants left school with the Abitur in 2012 and was thus formally allowed to take up university studies.
- Substantial gender differences can be found among those not active in the labour market. Among all groups, including native Germans, the share of women who are not in employment or training and not looking for a job is two times (native Germans) to four times (German-born children of immigrants) higher than for males of the same group. Every fifth woman born in Germany of Turkish parents is not active in the labour market at all.
- Occupational status is still lower for immigrants and immigrants' offspring than for native Germans, especially among those with Turkish roots. Status scores were slightly higher among German-born females than among German-born males for both Turkish and Yugoslav parental origin groups, while the same gender difference does not apply to Germans of native descent.
- Over time, there was little change in occupational status for the children of immigrants. Males with Turkish roots and females with Yugoslavian roots overall show stagnating status scores, while the occupational status of females with Turkish roots and males with Yugoslav roots is slightly increasing.
- After controlling for education – that is, when comparing individuals holding similar educational degrees – male and female children of immigrants from the former Yugoslavia no longer differ from native Germans in a statistically significant way. However, Turkish males and females still do, even though these differences are rather small.
- Analyses of immigrant-native gaps in occupational status over time reveal that German-born males with parents born in Turkey did not differ significantly from native Germans with similar educational degrees back in 2000, i.e. gaps have increased rather than decreased over time. For German-born females with parents born in Turkey, the change between both years was less pronounced. For both male and female children of immigrants from the former Yugoslavia, no substantive changes can be observed.

- The chapter accords with previous research demonstrating the importance of educational degrees for the labour market situation of immigrants' offspring. As the labour market disadvantage of the children of parents born in Turkey is not fully explained by their lower educational endowments, recent studies show that two factors are important in explaining this puzzle: inter-ethnic ties and lower German language skills. While German language proficiency seems to be of particular importance in the labour market integration of children of parents born in Turkey, intra-group ties and fluency in the language of the country of parental origin do not seem to have any effect.

Immigrants from Turkey and the former Yugoslavia in Germany

In the past few years, Germany has taken in large numbers of refugees from the Middle East and Africa. Even though these groups are currently the focus of public and academic debate, the current migrant population still mainly reflects the German guest worker (*Gastarbeiter*) legacy. Most individuals with a non-German background come from recruitment countries that include Turkey, the former Yugoslavia, Italy, Spain and Greece. Their social status also reflects the fact that most of them were recruited expressly as low-skilled labourers. While some former guest worker groups have made great strides in terms of their integration, others still struggle on their way upwards in the education system and the labour market.

The largest single group with a labour migrant background in Germany is the Turks. This group includes individuals who immigrated as so-called "guest workers"; their family members who entered Germany as spouses before or soon after the recruitment stop in 1973; and Kurds, who mostly arrived as asylum seekers. Afterwards, many individuals entered the country as "marriage migrants", joining their spouses who were often born in Germany. In 2015, 28 000 individuals emigrated from Turkey to live in Germany (Statistisches Bundesamt, 2015); during the past years immigration figures have been rather low for this group.

The second largest group that immigrated as guest workers is the migrants from the former Yugoslavia. After the recruitment period, many individuals entered the country in the 1990s as refugees from the Balkan wars. In 2015, immigration from the successor states of Yugoslavia to Germany was much higher than from Turkey to Germany: about 57 000 individuals emigrated from Croatia, 42 000 from Serbia and 41 000 from Kosovo, to name just the largest sending successor states (Statistisches Bundesamt, 2015).

Many children of these immigrants from Turkey and the former Yugoslavia that were born in Germany have entered the education system or the labour market. The two groups show distinct patterns of integration in both fields: Turks lag behind in both systems according to numerous studies (Kalter, Granato and Kristen, 2007; Kalter and Granato, 2017; Hartmann, 2016; Diehl, Hunkler and Kristen, 2016). In turn, migrants from the former Yugoslavia have become more similar to natives. This chapter provides an overview of the integration patterns of German-born children of immigrants with Turkish and Yugoslav roots, both in the education system and in the labour market. The overview will be broader than existing studies that focus mostly on the status quo in only one of the two systems. Moreover, it will also describe patterns separately for men and women and assess change across generations and over time. After presenting results based on the German Microcensus, the discussion will focus on the most prevalent approaches explaining these group-specific trajectories.

Data

To analyse the intergenerational mobility of migrants, the chapter will draw on data of the German Microcensus (GMC), an annual household survey of 1% of the population in Germany (Lüttinger and Riede 1997). The study combines data for the years 2000 and 2012. Analyses only include respondents living in the western part of Germany, because the classic labour migrants and their descendants still mostly live in this area. GMC information on parents' country of birth is available only for certain years since 2005, and is restricted to whether the parents were born in Germany or born abroad. Therefore, citizenship is used – and in 2012 former citizenship as well – to identify the different ethnic groups. Based on (former) citizenship and whether respondents were born in Germany, four groups are classified: Turks born in Germany, Turks born abroad, (former) Yugoslavs born in Germany and (former) Yugoslavs born abroad. These groups are compared to Germans of native descent.

The analyses include naturalised and non-naturalised citizens who emigrated from Turkey and Yugoslavia or one of its successor states, and the children of these immigrants. However, the migration background of individuals with German citizenship can only be identified in the GMC from 2012, and so the two data waves used are not perfectly comparable. To exclude naturalised individuals from the 2012 GMC would lead to a distorted and overly negative picture of integration processes over time, because naturalisation has accelerated since the late 1990s and integration is positively related to naturalisation (Diehl and Blohm 2008). To include them skews the analyses in the opposite direction, because naturalised individuals are part of the German comparison group in 2000. The chapter therefore presents results including German citizens with former Turkish or Yugoslav citizenship in the respective groups of immigrants and their offspring in 2012, denoted by "2012n". When analysing change over time, respondents with a former foreign citizenship are included in the German comparison group (denoted by "2012") for the sake of comparability with the 2000 data.

Educational attainment is measured with regard to the level of general secondary schooling and four levels are distinguished: the highest level (*Fachhochschulreife/Abitur*, i.e. maturity certificate), the intermediate level of general secondary education (*Realschulabschluss*), the basic level (*Hauptschulabschluss*), and no general secondary education accomplished. An additional category indicates whether information on the level of general secondary schooling is missing. Four groups capture the degree of labour market participation: participation in education or training, being employed, being unemployed, and no labour market participation. To compare occupational attainment between the four ethnic groups described above and the German reference category, the International Socio-Economic Index of Occupational Status (ISEI) is used, with scores varying between 18 and 90.

The chapter begins with a brief demographic sketch based on data from 2012 and then describes the situation of immigrants from Turkey and Yugoslavia and their children in the education system and in the labour market in 2000 and in 2012. In doing so it will assess how immigrant-native gaps change across generations and over time. The discussion then explores the factors triggering intergenerational progress and change, based on results from linear regression models. The estimated regression coefficients are presented as average marginal effects (AME). While the large number of cases covered by GMC data makes it possible to assess the extent to which labour market disadvantages for both immigrants and their offspring reflect educational degrees and thus their human capital, other factors known to play a role can only be analysed using specific survey

data. The chapter thus sums up the most important findings from existing studies on the role of language skills, social ties and ethnic discrimination.

Immigrants and their offspring from Turkey and the former Yugoslavia in Germany: A demographic sketch

A substantial share of individuals with Turkish or "Yugoslav" roots in Germany were born in the country – according to the GMC sample, about 40% and 25%, respectively. Both immigrants and their offspring[1] include naturalised and non-naturalised individuals. As can be seen in Table 3.1, 26% of the children of Turkish immigrants and 24% of Turks who immigrated themselves acquired German citizenship. The share is somewhat lower among immigrants and their offspring from the former Yugoslavia (17% and 22%, respectively – see Diehl and Blohm, 2008).

The gender ratio is almost balanced in all groups. At 21 and 22 years on average respectively, the children of Turkish and former Yugoslav immigrants are considerably younger than those immigrating, that is in their late 40s. Germans of native descent are older, at 44 on average, than the offspring of immigrants – a fact that needs to be taken into account when analysing majority-minority gaps especially in terms of educational attainment and labour market participation.

Only one in four individuals with Turkish roots and about one in three with Yugoslav roots immigrated during the recruitment period that ended with the halt in 1973. Some 32% of immigrants from Turkey and 42% of immigrants from the former Yugoslavia arrived in Germany after 1990. In both groups, the majority arrived between the ages of 7 and 25.

Table 3.1. Demographic characteristics

By migration background, 2012

	Persons of German descent	Children of Turkish immigrants	Turkish immigrants	Children of (former) Yugoslav immigrants	Immigrants from the former Yugoslavia
Naturalised (%)	-	26.3	23.7	16.9	21.9
Gender (%)					
Male	48.6	52.5	50.6	52.0	46.7
Female	51.4	47.5	49.4	48.0	53.3
Age (mean)	44.3	21.2	46.3	22.1	49.4
Number of cases	330 378	4 841	7 356	1 178	3 572
Period of immigration (%)					
Up to 1973			24.2		36.5
1974-1990			42.3		19.7
Since 1991			31.9		42.2
Missing			1.6		1.6
Age at immigration (%)					
Up to 6 years old			12.9		12.0
7-18			33.2		30.2
19-25			28.8		30.3
26-30			12.9		13.4
31-40			8.3		9.4
41 and older			2.2		3.0
Missing			1.6		1.6

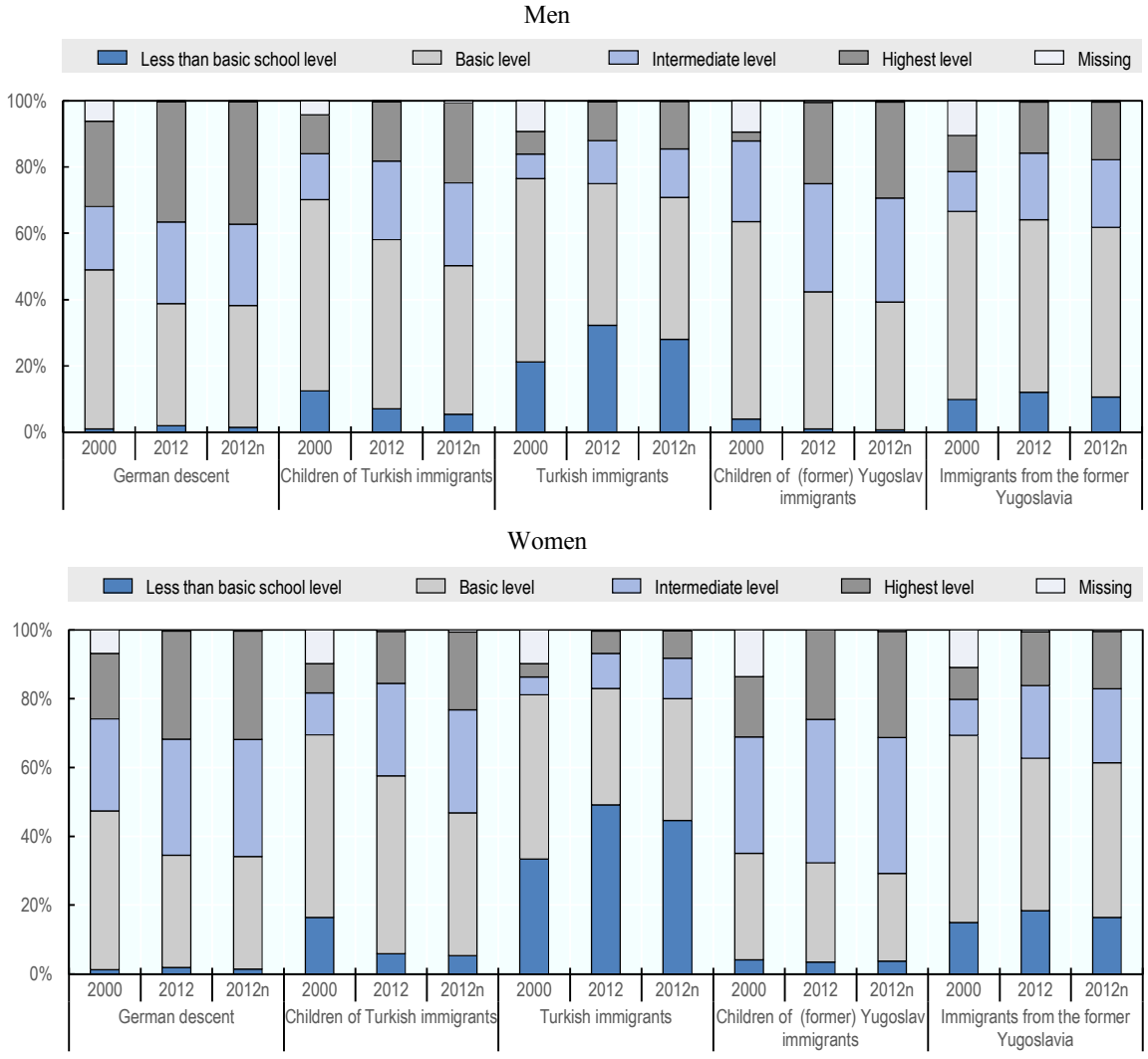
Note: Naturalised respondents are included in the respective ethnic group according to their former citizenship. There is no restriction on age. For more information on how the different groups are constructed, see the section "Data" above.
Source: German Microcensus (GMC) (2012).

Integration into the education system

Figure 3.1 shows that the native-born children of immigrants still hold lower educational degrees than Germans with native-born parents in 2012[2]. This applies to individuals with both Turkish and Yugoslav parents and to men and women, independent of whether naturalised individuals are included in one of the groups or in the comparison group with German parentage (see Figure 3.1).

Figure 3.1. Level of general secondary schooling

By migration background, ages 25-65, percentages



Notes: "2012n" – naturalised respondents are included in the respective ethnic group according to their former citizenship; "2000" and "2012" – naturalised respondents are included in the German comparison group. The categories correspond to the following German qualifications: Basic level education corresponds to the German "*Hauptschulabschluss*", intermediate-level to a "*Realschulabschluss*", and the highest level to the "*Abitur*" or "*Fachabitur*". For more information on how the different groups are constructed, see the section "Data" above.
Source: GMC (2000 and 2012).

Less than 10% of the children of Turkish immigrants – no matter whether they are naturalised or not – have left school without any diploma in 2012 (less than basic secondary school level). This share is lower for the children of immigrants from the former Yugoslavia. The most common educational attainment in both groups is still the basic level (*Hauptschulabschluss*), particularly among those with Turkish roots. Many children of immigrants from the former Yugoslavia have obtained an intermediate-level diploma (*Realschulabschluss*), and the share of those who have completed the highest diploma and are thus ready to enrol at a university or a university of applied sciences

(*Fachhochschule*) is also substantial, and approaches the share of those of German descent. Note, however, that this last group includes older individuals who finished school prior to the educational expansion in the 1970s. In 2012, almost every fourth child of Yugoslav immigrants and every fifth of Turkish immigrants left school with the Abitur. For both offspring groups, this share is distinctly higher when naturalised individuals are included. This ambivalent picture becomes somewhat clearer when changes across generations and over time are examined.

Generational progress is substantial for both origin groups, especially among females. This shows once more how important it is to study generational change rather than absolute levels of integration. Compared to the children of immigrants from the former Yugoslavia, those of Turkish descent started out from very low educational levels in their parents' generation, as a look at those immigrating shows. In 2012, about 50% of female and about 30% of male Turkish immigrants born abroad did not possess any educational degree. Given this rather difficult starting position, the children of Turkish immigrants have caught up substantially.

A look at development over time also reveals a dynamic picture for the children of immigrants. The share of individuals with a Turkish background who hold at least an intermediate school diploma was substantially higher in 2012 than in 2000, and the same applies to the share of those ready to enrol in tertiary education, even though it is still rather low in 2012. Among the offspring of immigrants from the former Yugoslavia the picture is similar with a higher share of Abitur in 2012 than back in 2000[3].

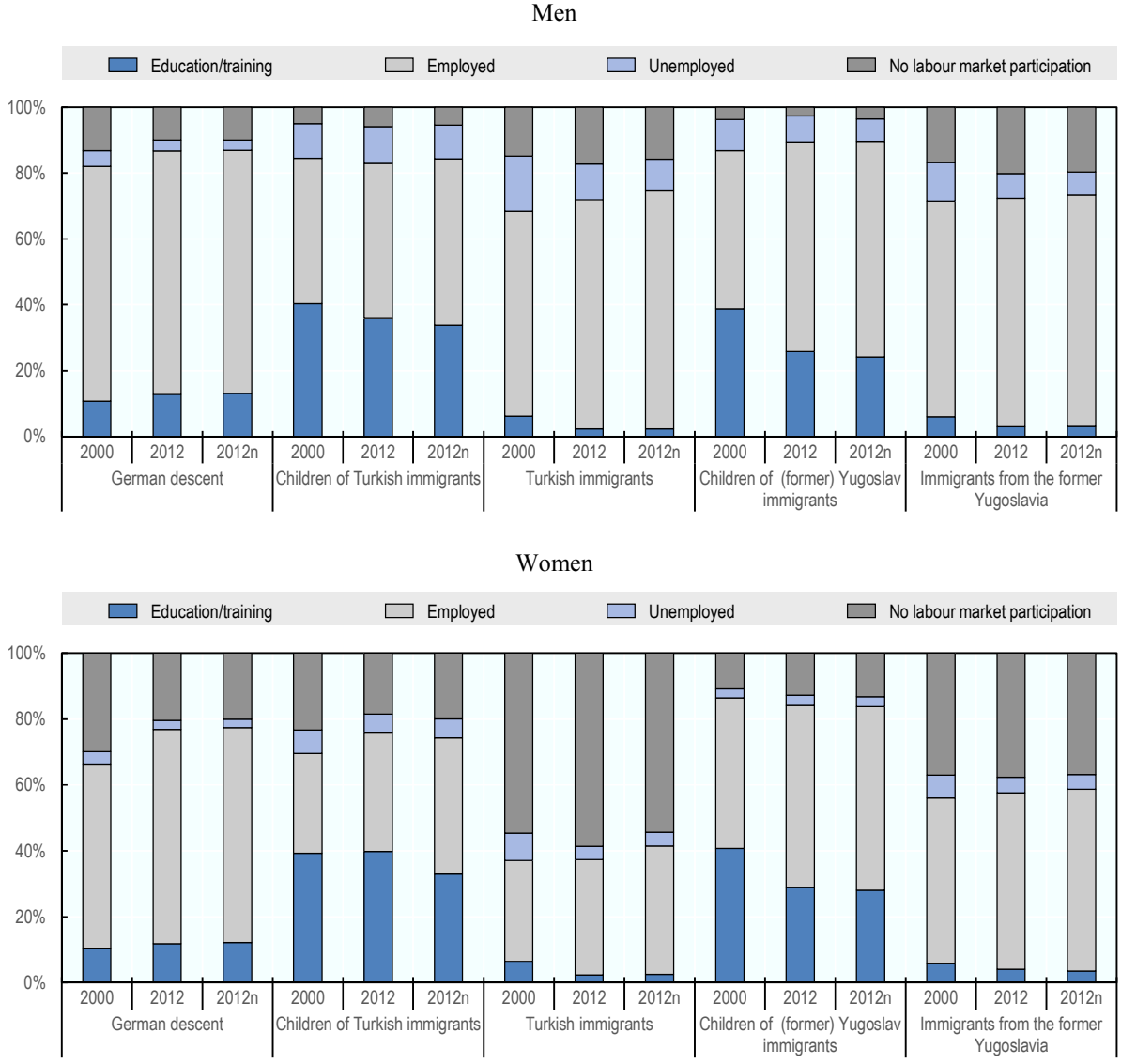
However, change over time was much less dynamic for those who immigrated themselves (see Figure 3.2). In fact, the share of Turkish immigrants holding no educational degree whatsoever is even higher in 2012 than it was in 2000. Among females, the share of individuals who have left school without a diploma has increased from about 33% to 49% or 44% (respectively excluding and including naturalised citizens) during this time period.[4] This puzzling finding most likely reflects an ongoing marriage migration of Turks with low levels of education. For this group, there are few other options to enter Germany legally. This would also explain why the increase in immigrants without any educational diploma is higher among females. Though gender differences are only moderate, more Turkish wives joined husbands living in Germany than vice versa (Aybek et al., 2013). In any case, this "replenishment" obviously did little to increase the educational levels of Turkish immigrants living in Germany, even though educational levels rose in Turkey between 2000 and 2011 (OECD, 2013).

Integration into the labour market

Trends in educational endowments across generations and over time have far-reaching implications for the integration of immigrants' offspring into the labour market. In general, gender differences are more pronounced in the labour market than they are in the education system (see Figure 3.2).

Figure 3.2. Labour market participation

By migration background, ages 15-65, percentages



Notes: "2012n" – naturalised respondents are included in the respective ethnic group according to their former citizenship; "2000" and "2012" – naturalised respondents are included in the German comparison group. For more information on how the different groups are constructed, see the section "Data" above.
Source: GMC (2000 and 2012).

In 2012, a large share of immigrants' offspring was enrolled in some sort of education or training: about 35-40% of males and females with Turkish roots, and about 25-30% of males and females with Yugoslav roots (Figure 3.2). The larger share among Turks might at least partly reflect the fact that they are slightly younger (Table 3.1). While gender differences are not large in this respect, they become more substantial when it comes to labour market inactivity. Among all groups, including those of native German descent, the share of women who are neither in employment or training nor looking for a job is two times (native German descent) to four times (German-born individuals with a

migration background) higher among females than among males. Every fifth woman of Turkish parentage born in Germany is not at all active in the labour market. In both immigrant origin groups, the share of those working is higher among men than among women. The offspring of Turkish immigrants not only have lower employment rates than Yugoslavs, but the gender gap is also larger for this group: the shares of employed Turkish males and females are 45% and 35%, respectively; those of Yugoslavs are 60% and 55%, respectively. The share of those seeking a job, i.e. the unemployed, is higher among men than among women for German-born individuals with Turkish or Yugoslav parents. Note that this is not the case among those of German native descent.

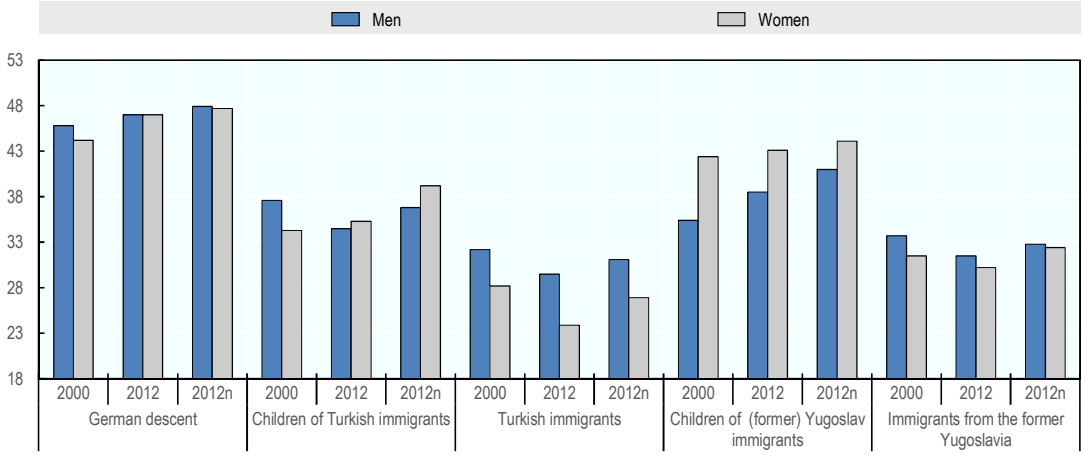
A comparison with those immigrating again reveals substantial generational change. Among those who themselves immigrated, the share of individuals who are neither in training nor otherwise active in the labour market is very high, especially among females and especially among Turkish females. Among females who immigrated from Turkey, between 54% and 59% were not active in the labour market in 2012.

There was little change in employment status over time for immigrants and their children. Between 2000 and 2012, an "ageing" of the immigrants offspring can be observed that is evident in the decreasing share of those individuals in training.

Turning to the occupational status of those who have a job in 2012, the ISEI scores reveal first of all that the children of immigrants, especially those with Turkish roots, still differ from Germans of native descent (see Figure 3.3). No matter which origin group is examined, scores were slightly higher among German-born females compared to German-born males in 2012, while this was not the case among Germans of native descent. This gender difference is more pronounced among children of Yugoslav immigrants. In fact, the ISEI scores of German-born females with Yugoslav parents are more similar to those for Germans of native descent than they are for any other group.

Figure 3.3. Occupational status

By migration background, ages 25-65, ISEI scores



Notes: "2012n" – naturalised respondents are included in the respective ethnic group according to their former citizenship; "2000" and "2012" – naturalised respondents are included in the German comparison group. Scores of the International Socio-Economic Index of Occupational Status (ISEI) vary from 18 to 90. The higher the ISEI score, the higher the occupational prestige. For more information on how the different groups are constructed, see the section "Data" above.
Source: GMC (2000 and 2012).

When compared with those who themselves immigrated, it can be seen that generational change is more pronounced among females than among males. In both groups, male immigrants tend to have jobs with slightly higher ISEI levels than female immigrants, while the opposite is true for immigrants' offspring born in Germany.

Over time, there was less change among the offspring of immigrants, as one would expect based on the dynamic changes in their educational attainment. Results also depend on whether naturalised citizens are included in the German comparison group or in the immigrant or offspring group in 2012. For children of Turkish immigrants, a moderate increase in ISEI scores can only be found among females and only when naturalised individuals are included in the Turkish offspring group ("2012"). Male children of Turkish descent show stagnating (2000-12) or even slightly declining (2000-12) ISEI scores. Naturalisation does not make much difference for native-born individuals with Yugoslav roots. In this origin group, females are consistently better off than males in terms of their absolute ISEI scores, though males show more increase over time.

Turning to the occupational status of those who immigrated, we see that it has slightly declined for some groups, especially among women with Turkish citizenship. As hypothesised above, this could reflect a changing composition of migrating individuals over time. In 2012 this group seems to include more recently arrived marriage migrants from Turkey. Such changes in the composition of this group – more volatile than that of the children of immigrants – could (over)compensate increasing levels of education among those immigrating who have been in the country longer.

Overall, the integration of those born in Germany of Turkish and Yugoslav descent – both in the education system and in the labour market – is a matter of generational change rather than change over time. While Turks born in Germany in particular have caught up considerably, lower educational attainment still predominates for this group. Yugoslavs born in Germany, on the other hand, have started to catch up even with respect to the share of Germans of native descent who are ready to enter the system of tertiary education. Both immigrant groups arrived for the most part as low-skilled labourers; some, lower in numbers, came as asylum seekers and refugees (see BMI/BAMF, 2013, p. 204). The analyses here, however, demonstrate that immigrating Turks had a much more difficult start in Germany in terms of their substantially lower educational endowments than those migrating from the former Yugoslavia. Individuals born in Germany with Turkish parents still struggle with this legacy.

The share of those who are active in the labour market or enrolled in some sort of training is much higher among German-born females with immigrant parents than among those who themselves immigrated. ISEI levels are also higher for the children of immigrants than for the immigrants themselves, especially among females. However, their ISEI levels are still lower than for those of native German descent. While generational change was substantial in terms of both groups' occupational and employment status, change over time was at best moderate. Fewer offspring are in training, a process that reflects the ageing of that group. ISEI scores have increased moderately among the children of immigrants (at least for males and females with Yugoslav parents and females with Turkish parents) or stagnated between 2000 and 2012 (for native-born males with Turkish parentage). Astoundingly, they even declined slightly among those who immigrated from Turkey during this period.

So far the discussion has covered the children of immigrants' educational attainment and their employment and occupational status on the aggregate level, and analysed change

across generations and over time. It now turns to the question of which factors trigger their labour market integration.

The role of educational attainment in labour market integration

According to human capital theory, the labour market performance of immigrants and their offspring mainly reflects their educational attainment, along with other aspects of their human capital such as job experience and training (for a detailed discussion see Kalter and Granato, 2017). Immigration of "guest workers" was selective with respect to human capital, since they were deliberately hired to perform jobs on the lower end of the occupational ladder. Furthermore, international migration – especially between countries that differ in terms of the quality of their education systems – often leads to a devaluation of immigrants' human capital. In other words, even those immigrants who had acquired educational qualifications back home, or who had already gathered some work experience, could only partly "transfer" these qualifications and experiences to the German labour market. Immigrants' motivation to acquire degrees and training in Germany was limited further because the recruitment programme was considered to be temporary in nature, with immigrants expected to eventually return to their countries of origin.

While these arguments cannot explain the labour market disadvantage of the children of immigrants who were born and raised in the receiving country, educational transmission is an important mechanism when it comes to the later generation's inheritance of low educational qualifications (Kalter and Granato, 2017). It is well known that children of parents who have no higher educational qualifications are less prepared for a successful educational career. They possess fewer skills and competencies, which are often gained from the family, partly even before children enroll in school (Diehl, Hunkler and Kristen, 2016).

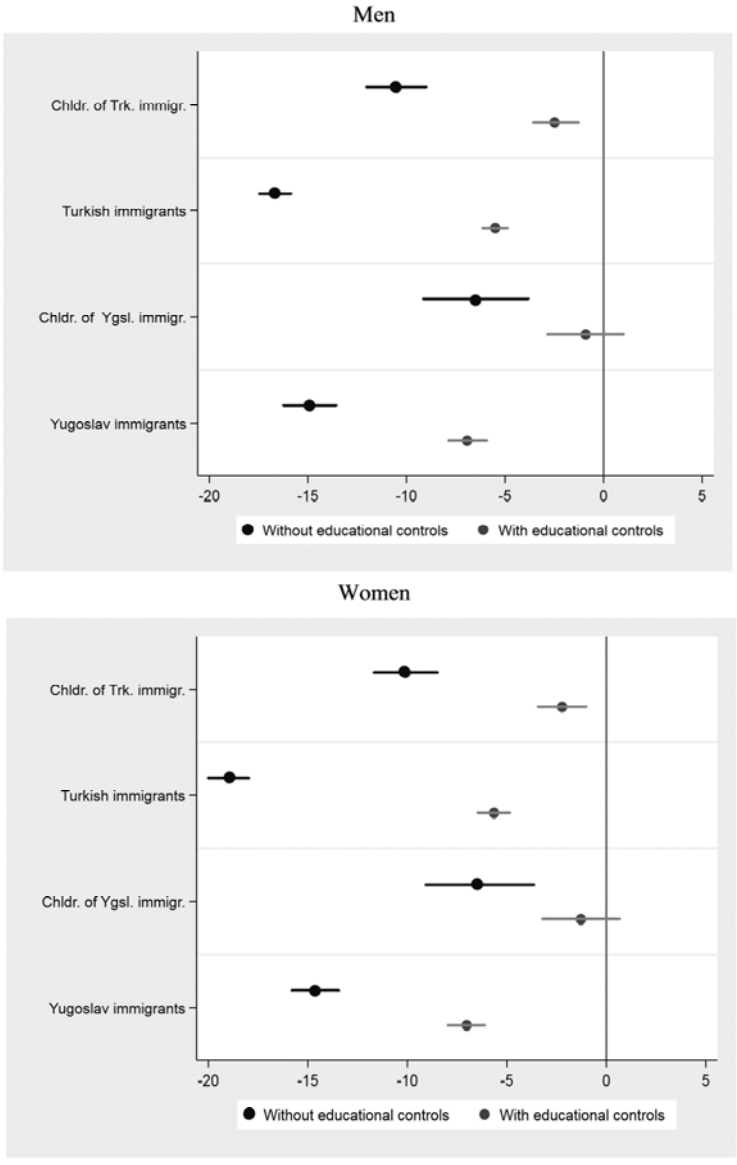
On the basis of these well-known theoretical arguments, one would expect that the labour market disadvantage of immigrants' offspring above all reflects their educational attainment, which overall is lower than the attainment of Germans of native descent due to the mechanisms described above. Accordingly, the chapter will now look into how much of the labour market disadvantage is explained by the lower educational degrees of immigrants and their offspring. The focus will be on differences in occupational status (ISEI) between Germans of native descent on the one hand and native-born children of immigrants on the other, and the question whether or not these disparities persist after comparing immigrants and their children with German natives with similar educational degrees (see Figure 3.4). Since this discussion begins with describing the situation in 2012, naturalised individuals are included in the respective immigrant or offspring groups. All models include age and work hours. The position of Germans with no migration background is indicated by the vertical line.

Figure 3.4 shows that in 2012, German-born employees with Turkish or Yugoslav parents (see blue points) held jobs with lower ISEI scores than Germans of native descent (represented by the vertical red line). These differences are more pronounced for the offspring of Turkish immigrants, while gender differences are negligible. After education is controlled for (see red points), the male and female children of immigrants from the former Yugoslavia no longer differ from Germans of native descent in a statistically significant way, but the male and female offspring of Turkish immigrants still does. Note, however, that these differences are rather small, as the following example shows: when German-born males with Turkish parents are compared to Germans of native descent

with similar educational endowments, the absolute difference in ISEI scores is 2.5 points (on an ISEI scale between 18 and 90).

Figure 3.4. Differences in occupational status (ISEI) between immigrants and their offspring compared to Germans of native descent

Ages 25-65, 2012, difference in ISEI scores



Note: The points in the figure represent the estimated regression coefficients (Average Marginal Effects - AME), reflecting the estimated difference in ISEI scores between the comparison group (Germans of native descent, represented by the vertical red line) and immigrants and their children. The horizontal lines around the points show the coefficients' 95% confidence intervals. The estimation model without educational controls includes only information on age, weekly working hours and survey year. The model with educational controls adds two indicators of educational attainment, the levels of general schooling and vocational training. Naturalised individuals are included among Turkish and Yugoslav immigrants and their offspring. For more information on how the different groups are constructed, see the section "Data" above.
Source: GMC (2012).

Immigrants themselves, in turn, have jobs with a lower occupational status than Germans of native descent – even if individuals with similar educational degrees are compared (see red points). Most likely, educational degrees from Turkey and the former Yugoslavia were not valued in the German labour market and/or the immigrants lacked the language skills to find an adequate job in Germany.

Turning to changes over time of the occupational status of children of immigrants (i.e. between 2000 and 2012), the results are presented in Figure 3.5. Naturalised individuals had to be included in the group of native German descent in both years in order to ensure comparability. For most children of immigrants in Germany, there was not much change over time – that is to say, no statistically significant difference can be found between 2000 and 2012. There is one exception, however: German-born males with Turkish parents did not differ significantly from Germans of native descent in 2000 but – as already seen in Figure 3.4 – they do differ in 2012. For German-born females with Turkish parents we see a statistically significant migrant-native gap as well, but this group's situation is more similar to the year 2000. For the offspring of immigrants from the former Yugoslavia, both males and females, no substantive changes over time can be observed.

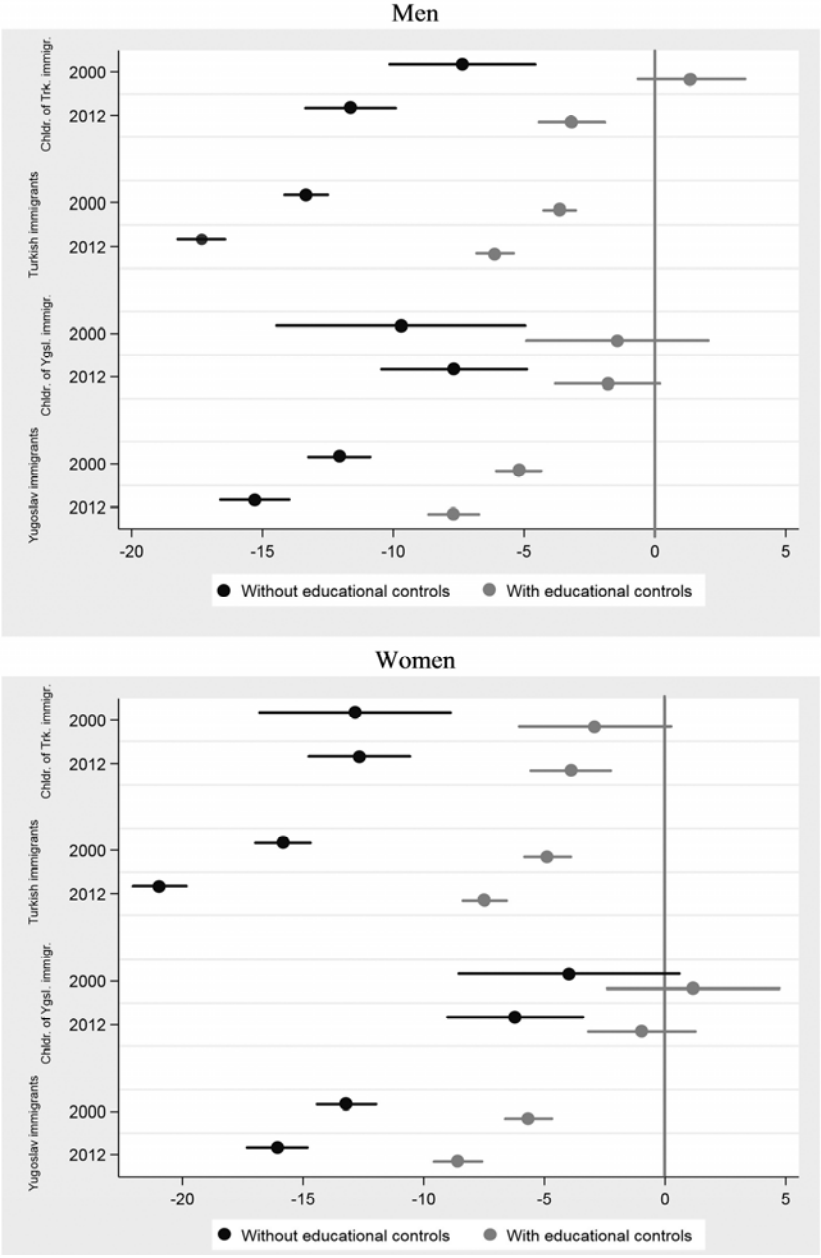
A look at the immigrants themselves suggests as well that the differences between them and Germans of native descent were more pronounced in 2012 than they were back in 2000, especially among immigrants from Turkey. The most likely explanation for the widening gap between 2000 and 2012 is that immigrants who arrived or entered the labour market after 2000 had lower educational attainment. In fact, we have seen in Figure 3.4 that the share of immigrants who had no educational qualifications whatsoever was higher in 2012 than in 2000, especially among Turkish women.

In sum, three results of this analysis of immigrant families' occupational status are noteworthy. First of all and most importantly, the children of Turkish immigrants of both genders continue to have jobs with a slightly lower occupational status than children of natives with comparable educational degrees, while this is not the case for the children of immigrants from the former Yugoslavia who are more or less on a par with children of natives. Secondly, the size of the gap between the male children of Turkish immigrants and Germans of native descent has widened over time. Thirdly, an increase in the native-immigrant gap over time can be found between immigrants from both countries of origin and the German comparison group.

The next section discusses possible explanations put forward in previous studies for the gap that remains after controlling for educational qualification between the occupational status of Turkish immigrants' offspring and that of Germans of native descent. GMC data does not enable testing or even looking into these explanations, because important indicators for the potential mechanisms are not available.

Figure 3.5. Differences in the occupational status (ISEI) of immigrants and children of immigrants compared to Germans of native descent

Ages 25-65, 2000 and 2012, difference in ISEI scores



Note: The points in the figure represent the estimated regression coefficients (AME), reflecting the estimated difference in ISEI scores between the comparison group (Germans of native descent, represented by the vertical red line) and immigrants and their children. The horizontal lines around the points show the coefficients' 95% confidence intervals. The estimation model without educational controls includes only information on age, weekly working hours and survey year. The model with educational controls adds two indicators of educational attainment, the levels of general schooling and vocational training. Naturalised individuals are included in the German comparison group. For more information on how the different groups are constructed, see the section "Data" above.
Source: GMC (2000 and 2012)

Explaining the persistent Turkish disadvantage

Previous studies in the labour market disadvantage of children of Turkish immigrants that remains even after controlling for their lower educational endowments have focused on two possible explanations. One emphasises ethnic discrimination, the other a lack of resources such as language skills and social ties that would help individuals make best use of human capital endowments. At first glance, much of the literature seems to favour the explanation centred on discrimination in the labour market. Survey data show that this group is less accepted generally than other labour migrants in Germany (Blohm and Wasmer, 2013). Audit studies have furnished some evidence of unequal treatment of individuals with Turkish sounding names. In many of these studies, applications are sent to employers that differ only with respect to the names of the alleged candidate. Several studies from Germany (but also from other European countries) show that Turkish names lead to lower callback rates. (For the German housing market see Auspurg, Hinz and Schmid, 2017; for the labour market see Kaas and Manger, 2011.)

However, minority members may (over)compensate actual or perceived discrimination by applying more often. On the other hand, they could be discouraged from applying for jobs and thus aggravate the impact of perceived or actual discrimination. In any case, it seems unlikely that the persistent labour market disadvantage of individuals with a Turkish background is fully explained by the rather moderate levels of unequal treatment identified in audit studies.

Recent empirical studies have therefore looked into immigrants' and their offsprings' endowments with resources that could help to make best use of a person's human capital. For example, social ties have been shown to increase access to job-relevant information (Lancee, 2012; for a classic study see Granovetter, 1973). In this respect, there is a key difference between bridging and bonding social capital. Bridging social capital, in the case of immigrants and their offspring transcends the limits of closely knit immigrant communities. It thus provides access to information about, e.g. job vacancies outside of these dense networks. Bonding social capital is restricted to these networks, and consists of close relationships with other trusted members in the same community. Immigrant families' bonding social capital may thus provide access to jobs mostly within these networks (Lancee, 2012).

The impact of bridging versus bonding social capital on the integration of immigrants and their children seems to depend on the resource endowments of the immigrant group as a whole. With respect to educational success, Kroneberg (2008) has shown that being in touch with persons from the same parental origin group has positive effects on children's educational outcomes only in those ethnic groups that have on average high levels of education. Kroneberg's study is based on US data, and no comparable study is available for Germany. This is partly due to the fact that given the country's migration history, there is not much variation in the average skill level of large migrant groups. However, it is safe to assume that for low-skilled groups migrating to western countries, jobs outside the ethnic enclave offer a higher occupational status, are more secure, and lead to higher earnings than jobs within dense ethnic networks. Jobs inside the "ethnic economy", in turn, may have the advantage of being accessible to minority members who may experience discrimination outside the ethnic enclave.

Studies on the role of networks and language skills in immigrants' labour market integration lead to some robust findings: networks with native-born Germans and German language skills have a positive effect on labour market integration, while networks within

the same parental migrant group and fluency in the language of the country of origin do not have any effect at all. Lancee, for example, runs panel regression predicting ISEI scores and finds that for men in particular, "bridging social capital improves both access to and performance on the labor market: it increases the likelihood of being employed, occupational status and income. Bonding social capital was not found to be effective" (2012, p. 133). Looking into employment chances, Kalter (2006) shows that the gap between immigrants and their offspring with a Turkish background and Germans of native descent that remains after controlling for educational degrees narrows substantially – and is no longer statistically significant – when social ties with Germans of native descent and German language skills are taken into account.

The studies by Lancee and Kalter are both based on data from the German Socio-Economic Panel (SOEP), but evidence has also been provided using other data sources. Koopmans came to similar conclusions in a recently published study based on data from the EURISLAM project, a survey that was conducted among Muslims in six European countries. According to this study, the disadvantage for children of immigrants in terms of higher unemployment disappears after taking into account socio-cultural variables. Most importantly, friendship and family ties to people of native descendant – for women – language skills improve the chances of being integrated into the labour market (Koopmans, 2016, p. 207ff)

As mentioned above, there is no information in the GMC about friendship ties and language skills but there are at least some hints in the findings presented in this chapter that the mechanisms described in the studies by Lancee, Koopmans and Kalter do in fact play a role. As already seen, the share of immigrating Turkish women without any educational attainment has increased – rather than decreased – over time, most likely due to selective immigration of rather low-skilled women from Turkey. This may be one reason why the children growing up in those households may still have a struggle succeeding in the labour market. Even though the share of those German-born individuals with a foreign background leaving school without any diploma declined between 2000 and 2012, many can be expected to come from households that offer only limited access to majority networks and limited opportunities for acquiring fluent language skills. According to a study by and Kristen, the share of Turkish families that speak German at home is still small (18%), and the share of those speaking only or mostly Turkish at home is large (39%) (Dollmann and Kristen, 2010, p. 133). As a consequence of selective immigration of individuals with low or no educational attainment, combined with a high share of households not speaking German at home, the children of Turkish immigrants may not have the necessary language skills to compete with Germans of native descent – not even with those who have low educational degrees themselves. Recent studies confirm that Turkish offspring who were born in Germany lag behind in terms of their German language skills (Olczyk et al., 2016, p. 58).

Conclusion

Integration of the children of immigrants still reflects the "guest worker" legacy that was characterised by low-skilled labour migration and followed by family reunification. Nevertheless, the offspring of Turkish and Yugoslav immigrants have caught up substantially in the education system and in the labour market. Fewer German-born children of immigrants have left general secondary school without any diploma, and more are ready to enroll in different kinds of tertiary education than in their parents' generation. In terms of entering the labour market, the biggest challenge falls to the large share of

children of Turkish immigrants leaving school with the lowest possible diploma, the *Hauptschulabschluss*. Through processes of intergenerational transmission, the educational attainment of the children of Turkish immigrants overall still lags behind that of Germans of native descent.

A closer look at both groups' employment and occupational status shows a similarly ambivalent picture. More children of immigrants are active in the labour market or involved in some sort of vocational training than their parents' generation, and generational change was particularly strong among females. In a similar vein, the occupational status of those born in Germany is on average higher, though still lower than for Germans of native descent. The gap in labour market integration between those two groups is to a large extent explained by group-specific educational endowments. However, and in line with previous findings, the analyses here revealed that the children of Turkish immigrants still have a slightly lower occupational status than Germans of native descent with comparable educational degrees. Furthermore, a data comparison from 2000 showed that this gap has increased rather than decreased over time, especially for males of Turkish parents.

Ethnic discrimination may offer a seemingly obvious explanation for this persistent disadvantage. Persons with Turkish parents are less accepted than other groups according to survey data, and audit studies have found unequal treatment on housing and labour markets. The impact of prejudice and discrimination on labour market outcomes is, however, difficult to assess. For example, several studies find that Turkish immigrants and their children no longer differ from Germans of native descent once they have achieved German language skills and social ties to Germans without a migration background (Kalter, 2006; Koopmans, 2016; Lancee, 2012). An explanation that not only accords with much recent literature but also finds some support here focuses on "under-equipment" in terms of social and cultural resources – most importantly, social ties to Germans of native descent and good German language skills. The chapter's finding that the share of Turkish immigrant women without any educational diploma increased between 2000 and 2012 suggests that ongoing marriage migration did little to improve the overall integration of these immigrants. Children growing up in these families can be expected to face disadvantages similar to those of children of German descent growing up in families with low levels of education. But on top of that, they also have to deal with specific disadvantages stemming from the migration background, such as growing up in a non-German-speaking household and having fewer opportunities to make friends with Germans of native descent. In other words, the family environment in which these children's integration processes evolve may be characterised by few opportunities to speak German and socialise with Germans of native descent. Further research needs to look into this potential downside of ethnic replenishment triggered by low-skilled marriage migration from Turkey. Even though this did not hamper the children's educational progress (their attainment increased between 2000 and 2012 – see Figure 3.1), it may have slowed down their social integration and thus also hampered their labour market integration.

The processes leading to persons with a Turkish migration background – even the offspring – having fewer language skills and social ties to Germans with native-born parents are linked to dynamics that are difficult to change because they take place within families and are also related to ethnic segregation in schools and neighbourhoods. On top of these dynamics specific to them, children with immigrant parents also face the more generic challenges of children from non-academic backgrounds, most importantly the difficulties of achieving the skills and competencies necessary for a successful

educational career. Avoiding segregation and levelling out the starting conditions for children from different social backgrounds is, however, a big challenge.

There does seem to be room for cautious optimism. This chapter showed that across generations, integration is progressing for all groups. Education levels and occupational status do rise though change is at best moderate over time, and native-immigrant gaps close only slowly over time. It has been argued here that this partly reflects ongoing ethnic replenishment, i.e. immigration of low-skilled individuals form Turkey. While this trend may have slowed down Turkish immigrant families' progress towards greater parity with natives, the trend may become less pronounced in the future. Immigration from Turkey has been very low during the past years, with on average only about 25 000 individuals immigrating to Germany annually (Statistisches Bundesamt 2015 and previous years, and own calculations). On that basis, integration processes in the education system and in the labour market could well accelerate in the near future.

Notes

1. The "children of immigrants" here refer to those who were born in Germany but hold (or held) foreign citizenship.

2 This group may include individuals with German ancestry who were born abroad.

3. Calculation of the share of immigrants' offspring who have achieved the Abitur in 2000 is based on small case numbers though, and so needs to be interpreted with care.

4. Note, however, that the question about educational diplomas was voluntary for those above the age of 51 in 2000. Many individuals among those not answering this question may not have any diploma. Nevertheless, among non-naturalised Turkish females in particular, the share of those without any diploma has increased even if no diploma and no answer are collapsed into one category.

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Chapter 4. The Netherlands: Intergenerational mobility of native-born children of immigrants from Morocco and Turkey

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Using research reports from the Dutch Social Cultural Planning Bureau (SCP) and data from The Integration of the European Second Generation (TIES) Survey, this chapter compares the intergenerational social mobility of the offspring of immigrants and their parents for the two most disadvantaged ethnic groups in the Netherlands. It follows the school and labour market careers of the native-born children of Turkish and Moroccan descent, describing outcomes at various stages and noting differences with peers of Dutch descent. Attempting to ascertain what produces the stark polarisation within this group – whereby some enjoy exceptionally steep mobility while others stay behind – the chapter points to the role played by the complex policies and institutional arrangements of the country's educational system. It goes on to discuss how educational outcomes translate into labour market outcomes, highlighting striking gender differences. Finally, it shows how the phenomenon of the "multiplier effect" can help children of less educated immigrants be successful against all odds.

Main findings

- The educational attainment of the native-born children of immigrants in the Netherlands varies across parental origin groups. Children of Turkish descent are three times more likely than the children of Antillean descent to reach only primary education (9% and 3% respectively), and 4 points more likely than children of Surinamese or Moroccan descent.
- The overall better educational results for the children of Antillean immigrants are for the most part explained by the much better socio-economic position of their parents, of whom two-thirds hold a secondary vocational certificate or tertiary degree.
- The most striking feature of the outcome of both the children of Turkish and Moroccan immigrants is the polarisation within each of these two groups. Among the children of Turkish immigrants, 27% are in higher education while an almost equal share (28%) are early school leavers. Children of Moroccan descent show a similar polarisation.
- A portion of the native-born children of Turkish and Moroccan immigrants have thus demonstrated a steep social upwards mobility compared to their parents. Especially women have often accomplished a remarkable social rise compared to their largely uneducated immigrant mothers. In fact, the daughters of Moroccan and Turkish immigrants have overtaken sons in almost all higher-level streams.
- Although preschool and its emphasis on second language learning are a key pillar in the Dutch policy framework, participation in it remains voluntary and about one quarter of children "at risk" are not reached. Furthermore, the separation of students who need language support from those who don't may contribute to a persisting division.
- The streaming recommendation that is made by schools at the end of elementary school reveals particular hurdles for the children of immigrants: it relies heavily on Dutch language ability and involves a discussion with the pupil's parents in which middle- and upper class families can use their social and cultural capital to secure the desired recommendation for their children. In contrast, immigrant parents are often less informed or less able to influence the school's recommendation.
- A little more than half of the children of Turkish and Moroccan immigrants responding to the TIES Survey in universities of applied sciences took the "long route" into higher education – meaning that they moved up gradually through a system of vocational education. The long route is one of the most crucial success factors in the Dutch school system for the upward mobility of disadvantaged children.
- Unemployment is frequent among early school leavers with immigrant parents. One and a half years after drop out, the unemployment rate reaches 54% for the children of Moroccan immigrants and 31% for the children of Turkish immigrants. In both cases, there is a large difference with early school leavers of Dutch descent (18%).
- Among the highly educated offspring of immigrants, more than one quarter works in a job below their skill level. Yet at the same time, more than 40% of early

school leavers with Turkish of Moroccan parents manage to work in a white collar or executive profession. This finding points towards considerable intra-generational upward mobility and the lower end of the occupational spectrum but a ceiling at the higher end.

Introduction

This chapter discusses the intergenerational mobility of Turkish and Moroccan immigrants' offspring in comparison to their parents, who came to the Netherlands through labour migration and marriage migration in the 1970s and 1980s. With 389 000 people of Moroccan descent and about 400 000 people of Turkish descent living in the Netherlands, the two groups are almost equal in size (SCP, 2016a). The two are also the most disadvantaged ethnic groups in the Netherlands, showing relatively low levels of education and high levels of unemployment. These outcomes result mainly from the immigrant parents' socio-economic situation, arising from the fact that the men recruited for work in the Netherlands came from the poorest and least developed regions in both Morocco and Turkey (Crul, 2000). In the case of Morocco, about two-thirds of the "guest workers" came from the Rif region in the north of the country. Education beyond elementary school was still largely absent in the Rif area. In central Anatolia, the region where most labour migrants from Turkey originate, the schooling situation was slightly better; a somewhat larger share of Turkish parents attended primary school, and some of the men also had a few years of secondary education. In the Netherlands, the initial situation of the Moroccan immigrants was comparatively the most difficult (Crul, 2000).

The three other large immigrant groups in the Netherlands came from former Dutch colonies: Indonesia, Surinam and the Netherlands Antilles. The people from Indonesia, mainly of mixed Dutch-Indonesian heritage, are considered a success among immigrant groups, and as a result are not targeted in policies or in research. The two other groups, however, have been subjects of research for the past four decades. The fact that in Surinam and the Antilles the curriculum followed was Dutch, and also taught in Dutch, has been an advantage for the integration of those who migrated into Dutch society. The parents of those of Antillean descent often came to the Netherlands to study and then stayed. More recent Antillean immigrants often come from the lowest socio-economic segments of the island population. Younger cohorts of Antillean descent consequently experience more negative outcomes, also scoring below the school outcomes of students of Moroccan or Turkish descent. As a result, the attention paid that group has been growing over the past decade, both in research and in policies.

The chapter makes use of research reports from the Social Cultural Planning Bureau (SCP) because these, on a biannual basis, provide detailed overviews of the school and labour market positions of the two topic groups. Apart from the SCP reports, the paper utilises research from scholars who are experts either on education or on the labour market in the Netherlands. Much of that research, like the SCP reports, is commissioned by the Dutch government because of political concerns about the disadvantaged position of the two groups. Lastly, the paper uses the author's research on the children of immigrants in Europe, which includes the largest survey on those of Turkish and Moroccan descent carried out in the Netherlands. This survey also contains information on the parents, and is therefore best suited to assess intergenerational mobility.

The chapter follows the school and labour market careers of the Turkish and Moroccan Dutch, describing outcomes at different stages. In doing so it reveals how the differences between this group and the Dutch of native descent come about, and whether gaps in

outcomes become smaller over time, or not. The discussion will point to a key characteristic of intergenerational mobility: polarisation within these offspring of immigrants – with one portion, of considerable size, demonstrating exceptional steep mobility and another, almost equal in size, staying behind. This chapter will try to ascertain what produces such stark polarisation in this generation and, also and even more so, in the generation that follows. This places the focus on policies and institutional arrangements in education and (the transition to) the labour market that seem to have benefited some more than others.

Box 4.1. The Integration of the European Second Generation (TIES) Survey

The TIES Survey (Crul, Schneider and Lelie, 2012) is the first systematic collection of data on the children of immigrants from Turkey and Morocco (as well as the former Yugoslavia) in 15 European cities inside 8 countries. In total, almost 10 000 people were interviewed. The participating countries are Austria, Belgium, France, Germany, Spain, Sweden, Switzerland and the Netherlands. This chapter uses data from the Dutch portion of the TIES Survey for the native-born children of Turkish and Moroccan immigrant parents from Rotterdam and Amsterdam. In the survey, the term "second generation" refers to children of immigrants who have at least one parent born in Turkey or Morocco; who were themselves born in the survey country; and who have had their entire education there. (Almost all respondents had two parents with the same national background.) At the time of the interviews, the respondents were between 18 and 35 years old. The total sample size was N=1000, with 500 respondents having Turkish and 500 respondents having Moroccan immigrant parents. Both groups had 250 respondents per city.

The TIES Survey is a sound source of information for studying intergenerational mobility, because of its focus both on the children of immigrants and on their parents. With about a thousand young adults in the former category, the Dutch portion of the TIES Survey is the largest study on this group in the Netherlands. Because the survey is conducted in two cities only – Amsterdam and Rotterdam – the study is not representative of the entire Turkish and Moroccan Dutch population in the Netherlands. Nonetheless, a comparison between the outcomes of the TIES survey with those of national surveys shows no substantial differences (Crul and Heering, 2008; Groenewold, 2008).

The immigrant parents

The Turkish and Moroccan parents of offspring born in the Netherlands are difficult to identify in most of the national survey data and reports. Because migration from both Morocco and Turkey is ongoing, a new cohort of immigrants is constantly merging with the earlier one whose children are the subject here. Today's immigrants had a different educational career than the wave that came in 1970s and 1980s, because since then Turkey and Morocco have opened their educational system to people in rural areas. Those who arrived in the 1970s and 1980s did not have these same possibilities, and were in general very little educated (Crul and Heering, 2008).

The TIES survey shows that most immigrant fathers came to the Netherlands in the 1970s, and the mothers followed on average five to six years later. According to the survey, about 95% of the fathers and mothers of the respondents were both born in either Turkey or Morocco, showing that there were hardly any inter-ethnic marriages. About

two-thirds of the parents have dual citizenship and about a third of them hold only citizenship of either Turkey or Morocco (Beets, ter Bekke and Schoorl, 2008). At the moment of the survey, in 2008, the majority of the parents had already lived thirty years or more in the Netherlands. This explains why the TIES respondents (all born in the Netherlands) over thirty were still a rather small group. Two-thirds of the Moroccan respondents lived in households with more than five persons. The Turkish households were somewhat smaller on average; only one-third of the Turkish respondents lived in a household with five or more persons.

The educational level of the immigrant parents was generally very low (see Table 4.1). For instance, over one-third of the mothers did not go to school at all. About half of all parents only went to elementary school at the most. The number of parents that attended tertiary education is very small indeed. The information about the education of the parents is derived from the interviews with the offspring respondents. As is clear from the category "Do not know" in the table, not all respondents were aware of the education their parents had in their home country. This is a limitation of the data within TIES.

Table 4.1. Educational level of the immigrant parents of native Dutch young adults between the ages of 18 and 35, percentages

	Turkish immigrant fathers	Turkish immigrant mothers	Moroccan immigrant fathers	Moroccan immigrant mothers
No schooling	7	17	21	40
Only Quran school	1	0	9	2
Elementary school	41	47	23	21
Lower secondary school	22	19	11	14
Upper secondary school	13	5	12	9
Tertiary education	6	3	4	1
Do not know	11	9	20	14

Source: TIES survey 2008.

For the majority of Turkish and Moroccan parents, education did not continue beyond elementary school. In contrast, in the comparison group of Dutch descent, only 7% of the fathers and 6% of the mothers did not continue beyond elementary school. In the Netherlands, this is a very small, atypical group; having no education beyond elementary school most likely indicates severe problems experienced during schooling. Looking at these three groups, i.e. Turkish, Moroccan and Dutch parents with very little education signals a need to treat comparative outcomes based on the education level of parents with great care. Low levels indicate different things for the three groups.

The TIES Survey also provides data on the labour market position of the parents before their migration, as well as when the offspring respondent was fifteen and at the time of the survey. Those data show that about 80-85% of the mothers did not have a paid job prior to their emigration. The share of Turkish working women was slightly higher than that of Moroccan working women. More than half of the men, on the other hand, were working in a paid job before their migration to the Netherlands. Three-quarters of those active were working in the lowest levels of the labour market in Turkey or Morocco. At age fifteen of the offspring respondent, about two-thirds of the Turkish fathers had paid jobs or were self-employed, as were a little over half of the Moroccan fathers. About 80% of the working fathers were doing unskilled work. One of the remarkable findings is that about one in five male immigrant men were in disability schemes in the Netherlands when the respondents were fifteen years old. This practice was common in the

Netherlands: in case factories had to close or reduce the number of employees, as a political solution people were often not fired but admitted into disability schemes. For many, this would mean the end of working life. In comparison, only about 5% of the men were registered as being unemployed at that point. The majority of immigrant women were not working when their child was fifteen. Only one in five immigrant Turkish mothers and one in six immigrant Moroccan mothers were working.

Most immigrant males were not mobile during their working life, but stuck at the bottom of the labour market in unskilled jobs. At the time of the survey most fathers had left the labour market, either because they were retired or because they lived from other benefits they received. Only a third of the Turkish immigrant men and about a quarter of the Moroccan immigrant men were still working.

This situation, with only one parent working in a low-level job or on benefits – in combination with large households – usually created a precarious income situation for the children of immigrants to grow up in. In educational, labour market and income terms, immigrant parents are at the bottom of the socio-economic hierarchy in the Netherlands. As a result, it is hard for their children to be anything but upwardly mobile by comparison.

Education and the children of immigrants

School outcomes of the children of immigrants

Every other year, the National Social Cultural Planning Bureau (SCP) publishes an update of school and labour market outcomes for the four largest immigrant groups in the Netherlands: people of Turkish, Moroccan, Surinamese and Antillean descent (SCP, 2014a, 2016a). Other incidental reports of the SCP add important information, like reports addressing the emancipation of women, or separate reports addressing labour market outcomes (CBS/SCP, 2016; SCP, 2014b). The reports of the SCP usually distinguish between immigrants and persons born in the Netherlands with one or both parents born abroad, and between men and women, and compare outcomes with pupils of Dutch descent (that is, born in the Netherlands with both parents also born in the Netherlands).

The school outcomes documented by SCP show a rather consistent picture for the four migrant groups over time. As shown in Table 4.2, the school outcomes for the children of Turkish and Moroccan immigrants are very similar, and the same is true for the children whose parents came from the two former Dutch colonies. The latter two groups leave school early less often, and are more frequently found in higher education.

Table 4.2. School level of the children of immigrants between the ages of 15 and 65 in the Netherlands, percentages

	Elementary school only	Lower vocational education	Secondary vocational education	Tertiary education
Turkish descent	9	19	45	27
Moroccan descent	5	19	46	30
Surinamese descent	5	13	46	36
Antillean descent	3	12	45	41

Source: Centraal Bureau voor de Statistiek/Social Cultural Planning Bureau (Survey integratie migranten 2015).

The relatively better educational results for the Antillean children of immigrants are for the most part explained by the much better socio-economic position of their parents. Two-thirds of the immigrant Antillean parents hold a secondary vocational certificate or tertiary degree. Many early Antillean immigrants came to the Netherlands for study reasons (van Niekerk, 2004). Since there are no universities on the Netherlands Antilles, people came and continue to come to the Netherlands to study. As a result, the first wave was something of an elite migration. However, since the 1990s, the migration has become increasingly diverse and more representative of the general population of the islands. The children of the more socio-economically diverse group now begin to appear in the migration statistics as the younger cohort of the Antillean children of immigrants.

Surinamese migration has always been more representative of the general population. For both groups, an important factor is language. Although many immigrants from both Surinam and the Antilles speak another local language at home, they also speak Dutch. For most of those immigrating, Dutch has been the instruction language in school, which gives them a huge advantage over the native Dutch with parents from Turkey and Morocco. Differences in outcome are thus indeed substantial between the two subgroups (labour migrants versus those from former colonies), but both class and language help to explain these differences. The school outcomes for the children of Surinamese and Antillean immigrants are almost on par with people of Dutch descent. A proper comparison is difficult to make however, because immigrant offspring are still concentrated in the younger age cohorts. In the group of Dutch descent aged between 15 and 64, many more people are in the older cohorts and were educated just after the Second World War, when educational opportunities where far fewer. This brings down the average education level of the whole group.

The most striking feature of the outcome of both the children of Turkish and Moroccan immigrants is the polarisation within each of these two groups. Among the children of Turkish immigrants, 27% is in higher education while an almost equal share (28%) has a lower vocational education certificate at the most, officially making them early school leavers. The former group has made a huge upward mobility leap compared with their parents, while the latter has more or less reproduced the low status of their parents. A similar trend is evident with the offspring of Moroccan descent. The polarised outcome here is even more striking, because the Moroccan parents are almost unanimously very low educated. As shown in Tables 4.3 through 4.8, socio-economic status does not forecast school outcomes in the same way for the children of immigrants as it does for people of Dutch descent (see also Holdaway, Crul and Roberts, 2009).

The SCP integration report 2016 from which these figures stem (Herweijer, Iedema and Andriessen, 2016) does not show school outcomes for men and women separately, but the report on women's emancipation from the Dutch Central Bureau of Statistics (CBS) and the Social Cultural Planning Bureau (CBS/SCP, 2016) does provide information on gender differences at different school levels. The results show how the daughters of Moroccan and Turkish immigrants have overtaken the sons in almost all higher-level streams. The educational success of women has important consequences for intergenerational mobility, which will be discussed in more detail further on. In short, if women are successful in school, their success is a reason to be allowed to postpone marriage. If they can postpone marriage until after finishing higher education, they will then be old enough to make their own choices. This involves choosing their own partner, who is then more often also born or raised in the Netherlands and is also more highly educated. With more highly educated couples, women more often enter the labour market.

The turning point for the women overtaking the men in educational success came a bit earlier in time for women of Moroccan descent than for those of Turkish descent. This is usually attributed to the fact that the greater social control in the Turkish community initially resulted in pressure on young girls to marry early, often resulting in them leaving school early (Crul, 2000; Crul, 2010; Crul and Doomernik, 2003; de Vries, 1987; Lindo, 1996). Nowadays it is the reverse, with the younger men ceasing their studies early and the young women continuing with theirs (CBS/SCP, 2016). The trend of women doing better in education found nowadays partly stems from the experiences of the older cohort of daughters of immigrants. For some of these women, marrying young did not work out and then, because of their lack of schooling, they were unable to find employment and support themselves. This made people in the communities aware that education is also important for women. Secondly, the smaller group of women in the older cohorts who did continue to study proved that one could be successful in school and be a respectable woman at the same time. These women became role models for the younger women, and opinions on the importance of education for women gradually changed as a result (Crul, 2010).

The differences in school outcomes for the four biggest ethnic groups compared to people of Dutch descent can therefore partly be explained by age, gender or the educational level of the parents. When corrected for those three variables only half of the gap remains for the children of Turkish immigrants and only a quarter for the Moroccan offspring. Over a ten-year period, the gap has been reduced by *two-thirds* for the children of Turkish and *five-sixths* for the children of Moroccan immigrants. This shows that if we take background characteristics into consideration the gaps are no longer sizeable.

The educational pipeline

The figures from the SCP report 2016 (Herweijer, Iedema and Andriessen, 2016) only show final school outcomes. By focusing on entire school careers – starting from preschool onwards – the next paragraphs will show in more detail how these final results have actually come about.

Box 4.2. The Dutch educational system

The vast majority of Dutch natives with immigrant parents attend school in the Dutch system, one of the most complicated school systems in Europe (EP & Nuffic, 2015).

Pupils enter primary school in the Netherlands at the age of four. In the Dutch educational system, one is free to choose the school of one's religious or ideological preference at no extra cost. Schools all teach the same curriculum, and school fees are very low or non-existent.

Primary school consists of eight grades. During the final two years, pupils take national examinations crucial in shaping their further school career. Based on the test results and the recommendation or "advice" of the teacher, they will be assigned to different streams in the secondary school system. As children usually leave primary school at age 12, streaming in the Netherlands happens relatively early on.

In secondary school, there are six different potential streams: two prepare for higher education, and four prepare for different levels of vocational education. The two pre-academic streams, HAVO (higher general secondary education, five years) and VWO (preparatory scholarly education, six years) prepare for a university of applied sciences (HBO) and a research university (Universiteit) respectively. The four vocational streams all take four years and cover different cognitive and skill levels. Praktijk onderwijs, the lowest level, caters to students with severe learning and/or behavioural problems. Many of the students in this stream receive special assistance. VMBO-basis is also a very basic level of vocational education. Both levels only give access to a two-year MBO-2 level (middle-level applied education) of secondary vocational education at age sixteen. MBO-2 prepares students for unskilled labour and is considered the very minimum level with which one can enter the labour market (a startkwalificatie). VMBO-KB (preparatory middle-level vocational education, middle management-oriented learning path) and VMBO TL (theoretical learning path) are somewhat more prestigious and prepare for the middle-level secondary vocational streams MBO-3 (three years) and MBO-4 (four years). After completing MBO-4, students can continue studying higher vocational training in HBO. An important characteristic of the Dutch school system is that pupils can move from one stream to the other with relative ease. They can, for instance, start at VMBO and move up step by step via MBO to HBO and a Universiteit, taking what is called the "long route" through the educational system. Doing so takes up to three years longer, but it is the route chosen by many children of immigrants.

Preschool

One of the main Dutch policy instruments combating educational inequalities is directed at preschool. With the aim to reduce Dutch language deficits from 2000 onwards, the government launched policy arrangements for VVE (preschool and early school education, *Voor- en vroegschoolse educatie*). VVE policies especially target children of immigrants from disadvantaged families (Driessen, 2012; Inspectie van het Onderwijs, 2010; Jepma, Kooiman and van der Vegt, 2007; Onderwijsraad, 2014; van Tuijl and Siebes, 2006; Veen, Roeleveld and Leseman, 2000; Veen, van der Veen and Driessen, 2012). The emphasis on second language learning at a young age has been embraced by all Dutch governments in power over the past two decades (Onderwijsraad, 2014). It is often put forward as *the* solution to closing the educational gap. However, the Dutch

school arrangements for preschool make it difficult to deliver on the aim of closing that gap. In the Netherlands, preschool is not part of compulsory school; participation is voluntary and comes at a cost. Therefore, in recent years much of the policy attention has been directed at raising the percentage of children of immigrants attending VVE preschool facilities. Efforts have been largely successful, but a considerable group (about a quarter) of potential "at risk" pupils are not reached (Veen, van der Veen and Driessen, 2012).

A further impediment to closing the gap is the very way preschool is designed in the Netherlands. The general policy is that children of immigrants and children of disadvantaged families attend a separate provision called *voorschool* three half-days a week (between 10 and 12 hours in total). With few exceptions, in practice this means that in the cities, children of immigrants are placed together in preschool, separately from children of Dutch descent whose first language is Dutch. The children of Dutch descent go to the crèche or *peuterspeelzalen* three to five full days a week (between 24 and 40 hours). In the *voorschool*, the preschool especially designed for children from disadvantaged families, much attention is paid to second language learning using specialised methods (Leseman and Veen, 2016).[1]

Elementary school

The largest portion of the extra budget for children of immigrants in education is spent in elementary school. In the past, schools received almost twice as much funding for a child of less educated immigrant parents as for a child of middle or upper class native Dutch parents. In 2007 this funding system was replaced by a weighting system based solely on the educational level of the parents (Claassen and Mulder, 2011). Still, schools with a high number of immigrant children receive considerable extra funding. The apportioning of this extra money is largely determined by the schools themselves, or by the school's umbrella organisations. Most schools use the money to hire extra teaching staff and to reduce the number of pupils per class. Many schools also have invested in second language teaching. Although it is difficult to prove a direct relation between interventions and results, in general the school results show that gaps between the children of immigrants and pupils of native descent are indeed reduced during the elementary school period (Roeleveld et al., 2011).

Selection and streaming in secondary school

School advice at the end of elementary school which is partly based on a national test (the Cito test) is crucial to a pupil's opportunities after elementary school (see Box 4.2). A point often raised is that the national test relies heavily on Dutch language capability. Since the language gap is not entirely closed during elementary school, this is an important issue in validating the national test score as a proper instrument to assess a pupil's cognitive skills (Driessen, 2012; Fettelaar, Mulder and Driessen, 2014; Roeleveld et al., 2011). Dutch language capabilities thus have an important impact on streaming. During grade 8, all pupils – and their parents – receive what is called "school advice", which is based on the national Cito test score and on the opinion of the teacher. In practice this is not just advice: it has important consequences for the type of school the pupil can be admitted to. The advice takes the form of an official document for the secondary school; it is given during a parent-teacher meeting to discuss the Cito test score and, more generally, the development and attitude of the pupil over the years. This introduces a subjective element into the pupil's progression at the end of primary school. Parents can try to secure admission to a higher stream in secondary school than initially

advised. The current advising process and the subsequent choice of and negotiation with secondary schools offer an opening especially for middle- and upper class families to use their social and cultural capital to secure a better outcome than most working class and immigrant families are able to do. In a report of the *Onderwijsinspectie* (Inspectorate of Education) **(**Inspectie van het Onderwijs, 2016), children with the same middle-level Cito test scores were followed over time in their trajectories in secondary school and beyond. Half of the children with highly educated parents would start in a pre-academic track in secondary school, while only a quarter of the children with less educated parents did. Further down the road, 55% of the children with highly educated parents had obtained a degree from tertiary education, while this was true for only 26% of the children with less educated parents, even with the same test results.

The long route into higher education

A special feature of the Dutch school system is that a student can climb the educational ladder by using different levels of vocational education as steppingstones. They can start at the lowest vocational level at age twelve, but in principle they can move from lower vocational education to secondary vocational education to higher vocational education to acquire a bachelor's degree. Of course in practice this it is not at all easy, and students need a lot of stamina because it takes three years longer than the direct route from the pre-academic HAVO stream (higher general continued education) to higher vocational education at HBO (universities of applied sciences). A bit more than half of the children of Turkish and Moroccan immigrants responding to the TIES Survey in universities of applied sciences have indeed taken this "long route" (Crul, Schneider and Lelie, 2012), proving that this option is a crucial success factor of the Dutch educational system. The long route repairs much of the damage that early streaming and the convention of school advice cause for children of immigrants and children of less educated parents. It offers an important contribution to intergenerational upward mobility.

These four aspects – special arrangements for preschool, early selection, school advice and the possibility to move up in the school system through the long route – are the main characteristics of the school system that shape school outcomes for children of immigrants in the Netherlands. In the past two decades, all four of these key features underwent crucial changes that have impacted school results, both positively and negatively. Policies to include more children of immigrants in preschool had a slight positive effect, and over the years elementary schools have become better equipped to work with this group. Eliminating intermediary classes while retaining the school advice process has widened gaps in secondary school. The long route fortunately offers the possiblility of repairing a lot of the inequalities built into the first part of the school system. However, this long route is under pressure because of a change in the funding system for higher education, and because higher education institutions are erecting more and more barriers for students entering through the long route. The fact that the long route is one of the most crucial success factors in the Dutch school system for the upward mobility of disadvantaged children asks for careful monitoring and a more fundamental rethinking of the school system.

Intergenerational mobility through education

The information from the SCP reports used here is usually based on cohort studies reporting on national outcomes between ethnic groups and national outcomes over time. As shown, these studies do control for parental education, but they do not show patterns of intergenerational mobility for different ethnic groups. To study intergenerational

mobility, the chapter makes use of the TIES Study. In this study respondents were asked a number of questions about their parents' education and socio-economic position. This allows examination of patterns of intergenerational mobility through education.

The educational level of the Turkish fathers and mothers correlates significantly with that of their sons ($p<0.01$) and daughters ($p<0.05$). The significant relations are however much less strong than is the case among the respondents of Dutch descent. The most important explanation for a lack of transferability of parental capital to the children of immigrants is that parents, even when they studied in Turkey or Morocco, cannot transfer their knowledge to a Dutch context. They do not have necessary information about the complicated Dutch school system, and because of a lack of Dutch language capability, helping their children with homework and speaking with teachers prove difficult. In the case of the intergenerational educational mobility of the children of Moroccan immigrants compared to the immigrant parents, there are not even any significant outcomes. That the Moroccan immigrants have more homogeneously lower levels of education than the Turkish immigrants results in less variation in education levels, which makes it also more difficult to find statistically significant differences.

Table 4.3. The educational level of Turkish immigrant fathers and their native-born sons, percentages

	Sons		
Fathers	Early school leavers	Middle level	Higher education
Primary or less	36	38	26
Secondary	18	43	39
Higher education	23	12	65

Source: TIES survey 2008.

Table 4.4. The educational level of Turkish immigrant mothers and their native-born daughters, percentages

	Daughters		
Mothers	Early school leavers	Middle level	Higher education
Primary or less	25	54	21
Secondary	15	52	33
Higher education	0	20	80

Source: TIES survey 2008.

Table 4.5. The educational level of Moroccan immigrant fathers and their native-born sons, percentages

	Sons		
Fathers	Early school leavers	Middle level	Higher education
Primary or less	21	51	28
Secondary	13	52	35
Higher education	11	67	22

Source: TIES survey 2008.

Table 4.6. The educational level of Moroccan immigrant mothers and their native-born daughters, percentages

	Daughters		
Mothers	Early school leavers	Middle level	Higher education
Primary or less	18	48	34
Secondary	11	52	37
Higher education	0	100	0

Source: TIES survey 2008.

In the case of respondents of Dutch descent, we see a much stronger correlation between the education of both the mothers and their daughters and the fathers and their sons.

Table 4.7. The educational level of native Dutch fathers and their sons, percentages

	Sons		
Fathers	Early school leavers	Middle level	Higher education
Primary or less	20	20	60
Secondary	10	34	56
Higher education	2	18	80

Source: TIES survey 2008.

Table 4.8. The educational level of native Dutch mothers and their daughters, percentage

	Daughters		
Mothers	Early school leavers	Middle level	Higher education
Primary or less	21	46	33
Secondary	9	25	67
Higher education	2	15	83

Source: TIES survey 2008.

Labour market outcomes of the native-born children of immigrants

Labour market outcomes: Participation, unemployment, income

How do the differences in educational outcomes translate into labour market outcomes? The chapter now addresses the outcomes for three different school-level groups: early school leavers; those with a secondary vocational certificate; and those with a higher education degree. Data are based on the TIES Survey and additional information from SCP reports; the latter are focused on the situation following the impact of the financial crisis on the labour market position of the children of immigrants.

Beginning with the data from the TIES Survey, Table 4.9 shows the participation rate of the two target groups in the labour market. These data were collected just before the financial crisis of 2008.

Table 4.9. Participation in the labour market of children of Moroccan and Turkish immigrants in relation to final educational outcomes, ages 18-35, percentages

	Early school leavers	Secondary vocational education	Higher educated
Children of Moroccan immigrants	70	73	79
Children of Turkish immigrants	70	87	98

Source: TIES survey 2008.

In general, the table indicates that the more highly people are educated, the more likely they are to participate in the labour market. If the outcomes are split according to gender, the results especially show differences for the early school leavers. Of the female early school leavers among the children of Turkish immigrants, only 52% participate in the labour market, compared to 89% of the male early school leavers. For the children of Moroccan immigrants, the corresponding figures are 43% for daughters and 94% for sons. So, about half of the daughters of immigrants who left school early do not participate on the labour market, reproducing the traditional gender pattern of their mothers. Among their more highly educated peers however, comparison does *not* show a significant difference between men and women. For the middle group (secondary vocational education, community colleges) there is a sizeable difference between the female and male offspring of Turkish immigrants (73% of the women participate versus 100% of the men) and a smaller difference among the children of Moroccan immigrants (80% versus 94%, respectively). Also in the labour market, gender roles seem to change more slowly in the Turkish community. The results also indicate that gender differences among the children of immigrants become considerably larger when people are less educated.

The next important indicator is unemployment, for which once again the figures are split for the three final school outcomes. For those educated at the lowest and middle levels there is little difference in unemployment rates, but for the highly educated the pattern differs between the Moroccan and Turkish children of immigrants. The numbers of those more highly educated who are already participating in the labour market are, however, small; thus caution must be exercised when interpreting the differences between the two groups. For the same reason, outcomes are not split according to gender.

Table 4.10. Unemployment rates of children of Moroccan and Turkish immigrants in relation to final educational outcomes, ages 18-35, percentages

	Early school leavers	Secondary vocational education	Higher educated
Children of Moroccan immigrants	14	13	17
Children of Turkish immigrants	18	17	3

Source: TIES survey 2008.

The SCP report of 2013 offers a more up-to-date picture of the situation of the children of immigrants in the labour market, including the effects of the financial crisis (Meng, Verhagen and Hijgen, 2013). That report also splits ethnic groups into three educational levels: early school leavers, people with a secondary vocational certificate (MBO) and those who hold a bachelor's or master's degree. The findings of the SCP report show a more negative picture than the figures of the TIES survey from before the financial crises. The children of Moroccan immigrants who are early school leavers score very high, with an unemployment rate of 54% 18 months after they left education. Among the early

school leavers who are the children of Turkish immigrants, the corresponding unemployment rate was 31%. In both cases, there is a huge difference with early school leavers of Dutch descent (18%). The high unemployment rates among early school leavers 18 months after school-leaving are alarming.

The young adult offspring of Turkish and Moroccan immigrants in possession of a secondary vocational certificate (MBO) show lower unemployment rates than the early school leavers, but still one in five (Turkish) and one in four (Moroccan) is unemployed. Among the children of Moroccan immigrants, unemployment is *five times higher* compared to peers of Dutch descent holding the same secondary vocational educational certificate (Meng, Verhagen and Hijgen, 2013). Part of the difference can be attributed to the type of secondary vocational educational certificate (Mbo-2, -3 or -4), but the report indicates (without giving further details) that the largest part of the gap remains unexplained (Meng, Verhagen and Hijgen, 2013). The financial crisis has hit the immigrant offspring especially hard: the gaps have grown notably between 2007 and 2012.

Many holding a secondary vocational certificate find their first job through an apprenticeship. Asked about problems finding an apprenticeship, 22% of the children of Moroccan descent indeed mention problems, compared to 15% of their peers of Dutch descent. The respondents of Turkish descent are doing slightly better, with 19% (Meng, Verhagen and Hijgen, 2013). It seems that difficulties finding an apprenticeship may play a role in explaining unemployment differences afterwards.

The TIES Survey revealed a major difference in unemployment rates between the highly educated children of Turkish and Moroccan immigrants. The SCP findings are based on a larger sample. Looking at the people with a BA degree, the situation of the highly educated children of Moroccan immigrants looks again a bit less favourable, but at the MA level it is the other way round. The gap with students of Dutch descent with the same diploma is very wide. The usual individual characteristics that explain such gaps do not greatly figure here, because the groups of recent graduates with BAs or MAs are very similar in terms of age and experience. This only leaves sector differences, networks, the way one searches for jobs and discrimination as the most important explanatory factors. Sectoral differences should actually give the children of immigrants a *better* position, because they are overrepresented in the prospering sectors: business, law, medicine and IT.

The SCP report shows that during the economic crisis the chances of unemployment grew substantially, indicating that if there are fewer jobs, the effect of discrimination and other factors, such as having the right network contacts, become more salient.

Table 4.11. Unemployment rates of recently graduated students with a bachelor's or master's degree, percentages

Recently graduated	Of Dutch descent	Children of Turkish immigrants	Children of Moroccan immigrants
Bachelor's degree	6	14	17
Master's degree	5	13	8

Source: SIS 2010-12 and VSNU WO monitor 2009-11.

In 2014, Andriessen, Ferhee and Wittebrood (2014) carried out a major research project on discrimination in different societal contexts, one being the labour market. For this research, people were selected based on a sample of register data with a response rate of

26%. Of the respondents of Moroccan descent, 41% mentioned experiencing discrimination while looking for work, as did 35% of the respondents of Turkish descent. Also, the discrimination reported during the search for an internship was relatively high, with 24% and 29% respectively for people of Moroccan and Turkish descent. At the workplace, slightly more than one in three persons in both groups reported instances of discrimination. In all three of these contexts, people of Surinamese and Antillean descent mentioned fewer instances of discrimination. The report created considerable public and political debate in the Netherlands over racism and discrimination in the labour market.

Andriessen et al. (2015) did a follow-up study in the region of The Hague the following year. The researchers worked with correspondence tests: they would submit applications for the same job openings with the same employers, submitting the same CV but under different names. They sent 504 applications for mid- and low-level jobs. The names used were typical Dutch, Moroccan or Hindustani Surinamese. The applicants with a Dutch name were invited almost twice (1.8) as often for an interview as those with a Moroccan name. When two extra years of experience were added to the CV of the applicant with a Moroccan name, the difference vanished. According to the researchers, this indicates that employers see a potential risk in hiring people from this group, but the risk can be reduced by extra work experience.

A further important question is whether or not the three groups (early school leavers, the senior vocational educated and the higher educated) find work at their own skill level. Again the TIES Survey data come into play.

Table 4.12. Job level of early school leavers among the children of Moroccan and Turkish immigrants, ages 18-35, percentages

Early school leavers	Unskilled	Skilled	Self-employed	White collar	Executive professionals
Children of Moroccan immigrants	42	11	3	35	9
Children of Turkish immigrants	45	10	0	40	6

Source: TIES survey 2008.

The findings show that about half of the early leavers still manage to get a position higher than unskilled work, which in turn reveals that for this group there is considerable room for mobility on the labour market.

Table 4.13. Job level of respondents with a secondary vocational certificate among children of Moroccan and Turkish immigrants, ages 18-35, percentages

Secondary vocational education	Unskilled	Skilled	Self-employed	White collar	Executive professionals
Children of Moroccan immigrants	19	9	1	56	15
Children of Turkish immigrants	14	12	5	56	13

Source: TIES survey 2008.

Depending on the type of diploma, senior vocational education can lead to skilled or white collar mid-level jobs. A considerable portion of this group even makes it into executive and professional jobs.

The last group to examine involves the people with higher education diplomas. Here a reversed trend can be seen: about a quarter of the people are working *below* their skill

level. The comparison group of more highly educated people of Dutch descent in the TIES Survey works much more often (81%) in an executive or professional function.

Table 4.14. Job level of respondents with a higher education diploma among children with Moroccan and Turkish immigrant parents, ages 18-35, percentages

Higher education	Unskilled	Skilled	Self employed	White collar	Executive professionals
Children of Moroccan immigrants	3	0	0	25	72
Children of Turkish immigrants	2	0	2	27	69

Source: TIES survey 2008.

To sum up the findings: for less educated daughters of immigrants, traditional gender roles play an important role in (not) entering the labour market. For those who are less educated and educated at the mid-level, both male and female, the labour market offers considerable opportunities to move up beyond their educational level. Regrettably, the children of immigrants who hold a higher education diploma still face considerable challenges, both when entering the labour market and in finding a job at their skill level.

Gender differences in labour market outcomes

In the SCP integration report of 2013, there is a separate chapter on immigrant women in the labour market (van der Vliet, Gijsberts and Dagevos, 2013). Here the authors look at women aged 20 to 50 and focus on life events that happened between 2007 and 2010. The report shows that 70% of the women of Turkish descent were working, as were 75% of the women of Moroccan descent. This is 10-15% less than in the group of women of Dutch descent. The report does not give separate figures for the children of immigrants. The report also gives figures for women quitting their paid work upon having their first child, and here there are separate figures for the children of immigrants. About a quarter of the daughters of Turkish and Moroccan immigrants stop working in a paid job after having their firstborn. That is two and half times more than women of Dutch descent (10%). An important explanatory factor for this difference is how child care is arranged in the Netherlands. For working parents, the financial contribution to child care is substantial. The tipping point of that cost becoming higher than the second income in the family is easily reached, especially if one has a low-wage job. For women with high-paying jobs, the balance is much more positive. In fact, child care policy discourages women with low-level jobs from staying in the labour market. These "choices" in their turn create an important difference in family incomes. Much of the income difference among households depends on whether the woman is also working a paid job. That variable often decides whether people can enter the middle class or not.

The mothers of the preceding generation of immigrants often stopped working when they had children, and did not return to the labour market. This was always one of the big differences with women of Dutch descent. Among the children of immigrants, the group of women who re-enter the labour market is much larger: 38% of those of Turkish descent, and 32% of those of Moroccan descent. For those of Turkish descent, this is only a fraction lower than among women of Dutch descent returning to work (40%) (van der Vliet, Gijsberts and Dagevos, 2013).

Intergenerational mobility in the labour market

This paragraph will look at intergenerational mobility based on the labour market position of the sons and daughters of immigrants compared with their fathers and mothers respectively. The outcomes in general show that the offspring are doing much better in the labour market than their parents.

Beginning with sons and their fathers, the focus is on the position the parents held in their career when the respondent was fifteen. The two groups examined are the largest: fathers working in low-level jobs, and fathers that did not have paid work at that time.

The largest group of fathers was working in low-level jobs when their son was fifteen. Of the Moroccan sons of this group, about a quarter (24%) does not have paid work now. Another quarter (21%) of the sons works at the same low level as their fathers. Slightly under half (43%) of the sons whose father worked in low-level unskilled jobs made a considerable mobility leap compared to their fathers.

The other big group in the generation of Moroccan fathers consists of men who were unemployed or in disability schemes when their son was fifteen. About a third of the sons (32%) are also not in paid work; 41% work at an unskilled level; and a mere 18% work at a considerably higher job level than their father. It seems that the sons of Moroccan fathers who were not active in the labour market when they were fifteen are doing worse now than those with a father working a low-level job when they were fifteen. The fact that Moroccan immigrant families were larger, combined with the family living on benefits, probably has contributed to a more precarious situation for these sons to grow up in. One can imagine that this has, for instance, affected where the family was able to afford housing, the availability of a room to study, and the pressure on the son to already begin working during school age.

Table 4.15. Comparison of labour market outcomes for sons of two groups of Moroccan immigrant fathers, percentages

Moroccan	No paid work	Unskilled work	Skilled work	White collar and executive work
Father with low-paid work	24	21	12	43
Father with no paid work	32	41	9	18

Source: TIES survey 2008.

In the Turkish group, differences between sons of working fathers and those of fathers who were not in paid work are not as pronounced. In both groups, a considerable number are doing much better in the labour market than their father.

Table 4.16. Comparison of labour market outcomes for sons of two groups of Turkish immigrant fathers, percentages

Turkish	No paid work	Unskilled work	Skilled work	White collar and executive work
Father with low-paid work	17	19	24	40
Father with no paid work	19	27	11	43

Source: TIES survey 2008.

For both groups, there is no significant relation between the job level of the father and the job level of the son. There is also no significant relation between the educational level of father and the occupation of the son.

Now moving to the mothers and their daughters, the largest group among immigrant women is formed by those who did not have paid work when their daughter was fifteen. Looking first at the children of Moroccan immigrants, there are no major differences between the daughters of mothers working in paid jobs and those of mothers not working in paid jobs. Of the daughters, 57% work in white collar jobs or in executive or professional jobs. These women made a large intergenerational mobility leap compared to their mothers, who often had very little education.

Table 4.17. Comparison of labour market outcomes for daughters of two groups of Moroccan immigrant mothers, percentages

Moroccan descent	No paid work	Unskilled work	Skilled work	White collar and executive work
Mother with no paid work	41	1	1	57
Mother with paid work	43	0	0	57

Source: TIES survey 2008.

With the children of Turkish immigrants, one does see differences between the daughters of mothers who were in paid jobs and those whose mothers were not. But here too, about half of the daughters are in white collar jobs, in executive or professional jobs, or self-employed. They also made a huge intergenerational mobility leap compared to their less educated mothers.

Table 4.18. Comparison of labour market outcomes for daughters of two groups of Turkish immigrant mothers, percentages

Turkish descent	No paid work	Unskilled work	Skilled work	White collar and executive work
Mother with no paid work	53	5	0	42
Mother with paid work	41	0	0	59

Source: TIES survey 2008.

The outcomes for the daughters of immigrants compared to their mothers appear to be much more polarised than the outcomes for the men. Those who enter the labour market usually do so in mid-level or higher-level jobs. However, it seems that those who must choose between working a low-level job and being a full-time housewife choose the latter. The high costs of child care might be the deciding factor in this choice.

The same analysis can be performed for the female respondents of Dutch descent. A comparison with male respondents of Dutch descent is not possible, because there is no comparably large group of fathers of Dutch descent with the same indicators as the Turkish and Moroccan immigrant fathers. The rare occasions of fathers of Dutch descent having no education at all, or no education beyond primary school, involve severe learning or behavioural problems and thus make comparison problematic.

For the female respondents of Dutch descent, comparison is possible. There are not a lot of differences between daughters whose mothers had paid work when they were fifteen, and those whose mothers did not.

Table 4.19. Comparison of labour market outcomes for daughters of two groups of Dutch native mothers, percentages

Dutch descent	No paid work	Unskilled work	Skilled work	White collar and executive work
Mother with no paid work	11	6	1	82
Mother with paid work	15	5	4	76

Source: TIES survey 2008.

Intergenerational mobility at the household level

Some of the TIES respondents were already married or living together with someone at the time of the survey, and information was gathered about their partner. The TIES data allow a glimpse at the number of incomes in these households. Data indicate that in almost half (44%) of the Moroccan households of immigrant offspring, both partners have a paid job; in 42% one partner works; and in 14% of the cases neither partner has paid work (note that this last group also includes students). The situation in the Turkish households is very similar: 42% have two household incomes; 50% have one income; and in 8% neither partner has paid work (again, this group includes students).

Comparing their situation with that of their parents when the respondents were fifteen reveals a radical change. In the Turkish immigrant households, 18% had two incomes, against 42% in those of the offspring of immigrants. There is a similar pattern for the group of Moroccan descent; considerably fewer households of the offspring are without income from work.

Table 4.20. Number of incomes in the households of immigrant parents and those of immigrants' offspring, percentages

	Turkish immigrants	Children of Turkish immigrants	Moroccan immigrants	Children of Moroccan immigrants
Two incomes	18	42	15	44
One income	45	50	53	42
No paid work	37	8	32	14

Source: TIES survey 2008.

This difference in the number of household incomes from paid work is the most dramatic change the offspring made compared with their immigrant parents. Two to three times more households live from two incomes, and two to three times fewer households must make ends meet without an income from paid work. More than half of the households with two incomes from paid work take home more than EUR 3 000 after taxation every month. Compared with the immigrant parents, they enjoyed a very steep rise in income. The women are the crucial factor behind this upward mobility; their educational level is decisive in this trend.

Table 4.21. Percentage of daughters of Moroccan and Turkish immigrants who have a paid job in relation to final educational outcomes

	Early school leavers	Secondary vocational education	Higher education
Daughters of Moroccan immigrants	32	83	96
Daughters of Turkish immigrants	35	60	68

Source: TIES survey 2008.

As seen before, when the women work they usually do so in well-paying white collar and executive or professional jobs. One can conclude that it is the women who are the drivers behind the most spectacular intergenerational mobility of the children of immigrants.

Looking at the people of Dutch descent a similar trend is evident, with the children much more often living in two-income households than their parents.

Table 4.22. Number of incomes in the households of parents of Dutch descent and those of their children, percentages

	Parents of Dutch descent	Children of Dutch descent
Two incomes	50	80
One income	45	17
No paid work	5	3

Source: TIES survey 2008.

Conclusion

Looking at education and labour market outcomes, there has been considerable intergenerational mobility for the native-born Dutch children of Turkish and Moroccan immigrants in the Netherlands. Especially for the daughters of the Moroccan immigrant mothers, the upward mobility has been remarkable. About a quarter of the daughters of Moroccan immigrants made it into higher education, while their mothers only went to elementary school for a few years or were illiterate. This is truly remarkable. The mobility of the children of Turkish immigrants is also considerable, but somewhat less pronounced. While the Turkish parents were slightly better educated than the Moroccan parents, the educational outcomes for the Turkish offspring are either at the same level as the Moroccan offspring or lower. The daughters of Turkish immigrants took longer than their peers of Moroccan parents to overtake the men in educational achievement. This can be attributed to more traditional gender roles and a tighter Turkish community that resisted change.

This chapter shows that educational success is no guarantee for a well-paying professional job. Although they do better than their peers with poor educational credentials, the more highly educated children of immigrants still have difficulties accessing the labour market, and many do not find a job at their skill level. This is a major concern, and not just for the people involved. It is a potential waste of talent, and it can send a negative signal to the next generation that there is not much merit in education.

The steepest mobility is evident at the household level. Comparing immigrants with their native-born children, the steepest mobility is found with respect to the number of incomes in the household. It is usual that whenever there are two incomes from paid work that people can move into the (lower) middle class and provide a substantially different

starting position for their children, the next generation. These children will grow up in a middle class environment and will go to the better-performing and more mixed schools. These families will, for instance, also have the financial means to send their children to full-day day care.

The large gains that the children of immigrants made on average compared to their parents, however, also conceal a group for whom social mobility is almost absent. This is the group that left school early, the group that in the case of the women often did not enter the labour market, and in the case of the men often include a partner that has no paid work. Traditional gender roles continue in this group, which hampers their social mobility. At best, it can be said that this group stagnates in a lower working class position. But one can also argue that stagnation could in fact create downward mobility for their children. Being an urban poor family means living in neighbourhoods that are unsafe, are unattractive, and have a high concentration of urban poor. In these neighbourhoods the schools are often weak. It is possible that the grandchildren growing up in these circumstances could be worse off than the generation before them, because their parents, being early school leavers, probably will not (be able to) transfer a positive message to their children about the advantages of good schooling. However, empirical evidence on the integration of persons whose grandparents have immigrated is currently lacking in the Netherlands.

One of the key findings of this chapter is the polarisation that exists among the children of immigrants. A large group of them have been remarkably successful given the background characteristics of their parents. However, there is also a group similar in size that stays behind. And their situation is one of the most vulnerable of all groups living in the Netherlands. This polarisation is why, in the Dutch debate about the position of the children of immigrants, according to some the glass is half full, and according to others it is half empty. The reality, however, is that both beliefs are true at the same time. The polarised outcomes are to a large extent the result of the Dutch educational system. The main determining factor is what is happening in secondary vocational education, MBO. Both success and failure are decided at that juncture in the educational pipeline. About three-quarters of young people with Turkish and Moroccan parents follow secondary vocational education. Those who obtain their certificate can move on to higher vocational education and get their BA. However, those who drop out of secondary vocational education only have a lower vocational secondary education diploma, making them early school leavers. The line between success and failure is therefore sometimes very thin. It is not only the intellectual capacities that determine success or failure at this point, but also, for example, determination and pull factors from the labour market.

In a study of successful offspring of immigrants the author, together with E. Keskiner, J. Schneider and F. Lelie, developed the theory of *the multiplier effect* to explain steep mobility (Crul et al., 2017). According to the theory, initial small differences between youngsters and their families and their peers multiply over time. This is probably most clearly visible among the girls. If they are successful in school, that is associated with later marriage. One would expect this to involve a higher likelihood of choosing their partner in full independency, who then more often is born or raised in the Netherlands and is also more highly educated. That situation would allow them to enter the labour market, with the result that there are two incomes in these households. With each consecutive step, they move further away from their less successful peers. In contrast, as TIES data show, a woman who drops out of secondary vocational education is more likely to marry young and to marry a partner who is also less educated and more often a (recent) immigrant from Turkey or Morocco. The young age and the low education level

make it all the more unlikely to enter the labour market. Here, institutional arrangements and traditional gender patterns make for an unfavourable situation. For those who can only apply for low-level jobs, the cost for child care tends to be almost equal to their wage. In these households, as the discussion has shown, there is often only one income out of paid work.

Choices early on in the school career can lead to big and consequential differences over time. The resulting "multiplier effect" (Crul et al. 2017) implies that the successful groups gain more social and cultural capital with each step upward that they make in education and on the labour market ladder. This explains how children of less educated immigrants can indeed be successful *against all odds*. They do not have the social and cultural capital in their family regarded as crucial to become successful, but they gain these forms of capital bit by bit along their way up. The people who, for instance, succeeded in getting into a pre-academic stream not only secured a position enabling them to continue to higher education directly after secondary school, but in doing so they typically also entered a different social environment, with students that mostly came from middle class families of Dutch descent. In the interaction with these middle class peers, they gain that cultural capital unavailable in their families. Once in university, they gain social capital through their fellow students, which later helps them access networks useful in the labour market. Thus, they acquire skills along the way.

The multiplier effect explains some of the large within-group differences. A second explanation may arise from how educational institutional arrangements affect outcomes. The Dutch educational system involves many choices, and unequal opportunities can result from these choices. This already starts at preschool: parents are the ones to decide whether to send their children to preschool or not. This also depends on the preschool places available in the neighbourhood where the parents live. Similar highly consequential choices must be made around the end of elementary school. As the chapter showed, pupils receive advice from their elementary school suggesting the type of secondary education best for them, but it is up to the parents whether to follow that advice or not. And children have different opportunities depending on that decision. Some secondary schools still offer the possibility of moving up to pre-academic streams after one- or two-year intermediary classes, while others do not. Limited knowledge of these differences can severely limit the chances of the children. The school "choice" is key in the Dutch system because of the early streaming at age twelve. This results in streaming a lot of pupils of immigrant descent into vocational tracks, often merely because of Dutch language deficiencies they still have at that age. That forces many onto the long route through senior vocational education. Since the route entails three additional years to get into higher education, deliberate choices must be made to continue studying and to pursue a higher education degree. This takes strong personal determination and family support, but it also involves financial consequences: postponing paid work but instead taking on a study loan. Looking at the entire educational pipeline reveals how, from the very beginning, inequalities persist that disfavour children with low-educated and poor parents, especially the many in this group who have immigrant parents.

Note

1. There is fierce debate among scholars about the effects of the voorschool. Driessen, in a blog in a national education magazine, talks about a denial by other scholars of facts suggesting that pre-school arrangements have hardly any effect (see also Bruggers, Driessen and Gesthuizen, 2014). Fukkink, Jilink and Oostdam (2017) also conclude, based on a meta-analysis of outcomes, that the effects of preschool arrangements are marginal or non-existent. Some reports, however, show that there are significant effects (van Tuijl and Siebes, 2006; Leseman and Veen, 2016).

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Chapter 5. Sweden: Intergenerational mobility patterns in immigrant and native families

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This chapter investigates the labour market situation of Swedish native-born sons and daughters in immigrant and native families with regard to their parents' education, as well as intergenerational educational mobility patterns for these families. The latter are compared in order to ascertain whether the roles played by institutions and family background vary across these two groups. Rather than focussing solely on father-son pairs, the chapter looks at all family combinations, including mothers and daughters and mixed couples. Since there can be differences across countries of origin for those families with an immigrant background, all country groups of interest are analysed separately. Transmission patterns are also investigated separately for different household types with regard to parental composition.

Main findings

- There is a significant and positive relationship between the educational attainment of parents and their children in Sweden. This relationship holds for both immigrants' and natives' families. Yet, the strength of the relationship is weaker for immigrant families – especially for those with two immigrant parents – suggesting a higher degree of educational mobility for those with an immigrant background compared to those with a native background – a common finding for several countries.
- Comparing immigrant and native-born families, Swedish studies consistently find a higher degree of upward mobility for immigrant families with less well educated parents and a higher degree of persistence at the higher end of the parental educational distribution.
- The composition of the parents in terms of origin countries plays a role in the transmission of education. There is a higher degree of educational mobility for families in which both parents are foreign-born compared to those with a mixed or a native background.
- There is a clear pattern of gender segregation in terms of educational attainment, regardless of maternal education and migration background of the parents. Results indicate a higher upward educational mobility for daughters than for sons. In both immigrants' and natives' families, daughters attain a higher level of education and indeed the highest level of education in the family. In fact, daughters of low-educated mothers are over ten percentage points more likely than sons to finish a long tertiary degree, for both children of immigrants and children of native-born.
- Daughters from Iran and Morocco with two foreign-born parents stand out in their upward mobility and indeed, there is no significant relationship between their education and that of their mothers. In contrast, low levels of the mothers' education especially seem to negatively impact on the sons' educational attainment in immigrant families.
- Daughters' employment rates are lower than those of sons in both immigrant and native families, but increase with the level of education of the mother, with the biggest jump observed for daughters of immigrants whose mother has obtained high school (compared with at most compulsory education). Among all groups, daughters with an immigrant background, display the lowest level of employment, especially when their mothers have only a compulsory level of education.
- Descriptive figures show that maternal education is not associated with differences in the employment rates of sons with native-born parents, in contrast to immigrant parents. However, the occupations of both sons and daughters of mothers – both immigrant and native-born – are correlated with the mother's level of education.

Introduction

The intergenerational transmission of a wide range of characteristics from parents to offspring has long been discussed in biology, medicine, psychology, sociology and

economics. In social sciences the interest in these transmissions is generated by the objective of guiding social and economic policy to counteract inequality of opportunity. Parents with greater resources are able to invest more in their children. These investments take different forms and can be direct or indirect as well as monetary and non-monetary. Children in families of high socio-economic status (SES) have access to high-quality child care, early childhood education, certain beneficial social network and neighbourhood characteristics, high-quality public schools or private schools, and universities. In addition, these children have greater access to books and technology in the form of laptops, tablets, etc., as well as certain social skills. Also, in interacting with their children, highly educated parents transmit to them a different set of cognitive and non-cognitive attributes, such as ambition. These are only a few of the pathways that throw into sharp relief the contrasting situation of children from low SES families. Theirs is an environment of restricted opportunities, with the parents transmitting the inequality they themselves experienced.

Positive assortative matching of single individuals via a set of characteristics, and transmission of these characteristics from parent to child, can be seen as a major source of inequality in society (Smits, Ultee and Lammers, 1998; Fernandez, Guner and Knowles, 2005). The reproduction of social and economic disadvantage from one generation to the next has been studied in relation to several outcomes, such as education, social networks, social class, socio-economic status, occupational status and income. In terms of economic inequality, the intergenerational persistence of education and income levels is an important indicator of the extent of transmission of economic disadvantage across families. Several pathways transmitting disadvantage, suggested through contrast above, can be counteracted and compensated by public policies such as universal provision of high-quality child care, early childhood education and high-quality public schools. Such policies can provide equal opportunities through government investments in children's human capital (Solon, 2002). So it is that several cross-country studies have focused on ongoing intergenerational economic disadvantage and the degree of economic mobility across generations in order to investigate differences across societies.

Intergenerational transmission in the case of ethnic minorities has been discussed in the context of maintaining group-related ethnic, religious or cultural traits over generations, which leads to diverging and distinct group characteristics within a country. Some of these studies include analyses of intergenerational cultural transmission; the majority find evidence that parental inputs significantly affect individual outcomes (Bisin and Verdier, 2000 and 2000). Several characteristics are acquired by children through an imitation-and-adoption process depending on the socialisation actions of the parents and the environment in which the children live. How these characteristics are valued and transformed into material payoffs in the working depends also on the structure of the relevant labour market. However, regardless of the pathways, origins and mechanisms of transmission of disadvantage or advantage, public policies that aim at equality of opportunity will lead to social cohesion and economic efficiency. At the same time, actually identifying the specific pathways of these transmissions would lead to effective and efficient implementation of the policies. Education is an important determinant of outcomes throughout the life course; reproduction of educational inequality from the parents' to the child's generation will have major social as well as economic consequences. This chapter investigates the labour market situation of native-born sons and daughters in immigrant and native families with regard to their parents' education, as well as intergenerational educational mobility patterns for these families. The focus is not only on parent-child pairs, but also on family composition.

Literature overview

Intergenerational mobility

One way of studying intergenerational mobility in terms of social class is to create a socio-economic index based on occupations that ranks occupational levels and then correlates this index between parents and their offspring. This method has been used for cross-country analyses (Ganzeboom and Treiman, 1996). Other methods have also been employed, such as aggregating occupations according to the employment conditions experienced. In a comparison of three countries, Sweden is found to have greater class mobility than France or England (Erikson, Goldthorpe and Portocarero, 1979). Modelling social class mobility by using two-way tables to measure the moves between classes has been proved to be difficult, since structural shifts across generations will increase the appearance of absolute mobility by forcing families away from the diagonal. Thus measures of relative mobility have been utilised – such as log-linear models, which do not vary with compositional changes across generations (Erikson and Goldthorpe, 1992).

The recently increasing interest in intergenerational mobility and cross-country comparisons in economics literature is mainly due to data availability. These studies focus on earnings as the main variable, although doing so has its drawbacks where non-labour income is not acknowledged. In addition, those without paid employment are neglected, and majority of the literature centres on the relationship between fathers' and sons' earnings, which excludes females from the analyses. This literature has shown the importance of parental background and the persistence of disadvantage from parent to child, especially for the United States. The studies have mainly utilised intergenerational earnings (IGE), a common measure of the average persistence of earnings from the parents' generation to the offspring's generation. The importance of using long-run earnings for both parents and children in the income-generating ages is emphasised in these studies to avoid underestimating the IGE (Solon, 1992, 2002; Zimmerman, 1992). Early studies show that Nordic countries are characterised by significantly higher intergenerational income mobility than the United States or the United Kingdom (Björklund and Jäntti, 1997; Österbacka, 2001; Solon, 2002). Some of these studies have employed different data structures as well as different methodologies, making it difficult to draw solid conclusions. However, later studies using the same methods (intergenerational earnings elasticity, correlation coefficients and quintile mobility matrices but with standardised data structures) have also found that the Nordic countries have higher intergenerational income mobility than the United Kingdom and the United States, and that the latter has the lowest (Jäntti et al., 2006). Even though income remains substantially the same over the generations in all countries, there is a significant difference between the Nordic countries and the United States and the United Kingdom. Similar to the trends in income, in Nordic countries generational education levels are found to persist significantly less than in non-Nordic nations (Hertz et al., 2007). Universal access to human capital formation – including early child care and early childhood education – and redistributive policies are two of the factors that reduce ongoing disadvantage from one generation to the next. Equalised standards of living and expanded opportunities for further education have diminished the influence of social origin on education over time. This trend toward equalisation in Sweden has been documented (Erikson and Jonsson, 1996); the question is whether it influences all groups in a similar way – including those with an immigrant background – in the Swedish labour market, in the educational system, and in Scandinavian societies in general.

Intergenerational mobility of individuals with an immigrant background

Compared to reports on intergenerational mobility in earnings and education the literature on those with an immigrant background is relatively more recent. Both sets of studies focus on father-son transmission, especially in the case of earnings but also in education. Borjas (1992) and Card, DiNardo and Estes (2000) find that the transmission of earnings from immigrant fathers to sons in the United States is slightly weaker than for the country's overall population. Aydemir, Chen and Corak (2009) finds similar patterns in Canada for immigrant and native fathers and their sons but a weaker association for fathers and daughters in terms of earnings. On the other hand, Dustmann (2005) finds a stronger link among immigrant fathers and their sons compared to the general population. The results are mixed in the case of Sweden. Österberg (2000) finds similar results for immigrants and natives, while Hammarstedt (2008) and Hammarstedt and Palme (2012) report a stronger relationship between immigrant fathers and their sons compared to native fathers and their sons. This would suggest lower mobility among immigrant families compared to native families. Children born into immigrant families would thus seem to have fewer opportunities in the labour market and be shackled to the characteristics of their family background to a greater extent than those born to native families, which violates norms of equal opportunities. However, to answer whether this is due to greater persistence of educational attainment among immigrant families or whether it is due to, for example, discrimination in the labour market requires further research.

There are additional challenges in fully addressing earning mobility patterns in the case of immigrant families. Some of these are related to measuring lifetime earnings, where pre-immigration earnings history is not available. Low female labour force participation for immigrant groups is another concern in terms of measuring mother-daughter transmissions. In addition, due to imperfect transferability of the skills of immigrants, parents' earnings do not necessarily reflect their full earnings potential in the destination country. There is evidence from several countries that immigrants are overeducated in their jobs. Discrimination too is a very important factor that could explain stronger ongoing disadvantage in the labour market among immigrant families. Thus, analysing educational mobility patterns has advantages over those of earnings as it is a reliable measure relatively early in life. Education has also been found to be a good proxy for overall well-being, although the gaps across employees in relation to the payoff for educational attainment are a major source of dissatisfaction among employees (Oreopoulos and Salvanes, 2011).

Unlike the literature on earnings mobility for immigrant families, that on the transmission of education is less contradictory, since the vast majority of studies find a weaker relationship among immigrant fathers and their sons compared to native families for Canada and Germany as well as Sweden (Aydemir, Chen and Corak, 2009; Dustmann, 2005; Eriksson, 2006; Borjas, 1992; Card, DiNardo and Estes, 2000). This suggests weaker ties between fathers' and sons' educational attainments for immigrant families compared to native families, which in turn may imply socio-economic integration. Few studies have analysed mother-daughter educational persistence, or included daughters in analyses of immigrant families (Gang and Zimmerman, 2000; Aydemir, Chen and Corak, 2009; Niknami, 2012). There can of course be differences across family members as well as by country of origin, and so all possible links will be included in the following analysis.

Immigration to Sweden

Looking at just two generations, approximately 30% of Sweden's population has a foreign background. Within the population of those with a foreign background, the proportion of those foreign-born is 57%; 17% are born in Sweden to two foreign-born parents; and 25% are born in Sweden to one foreign-born and one native-born parent (Çelikaksoy, 2016). There have been three main sources of immigration to Sweden. The first concerns migration from the Nordic countries during and after the Second World War. With the agreement signed in 1954, a common Nordic labour market was formalised, although it had already existed in practice prior to the signing of the agreement (Wadensjö, 2012). The main purposes of the agreement were maintaining full employment and achieving balanced regional development. From this period onward labour migration, primarily from Finland, continued. The second source concerned labour migrants from southern and eastern European countries in the 1950s and 1960s, recruited to work in the manufacturing sector, booming at the time. Thirdly, after the early 1970s labour migration became more restrictive, and refugee migration and family (re)unification became the largest sources of migration to Sweden. Refugees came from Estonia in 1944; Hungary in the late 1950s; Czechoslovakia and Poland in the late 1960s; Latin America, the Middle East and Africa in the 1970s; Iran in the 1980s; Yugoslavia (mainly Bosnia and Herzegovina) in the 1990s; and Iraq in the early 2000s. In 2005, the five largest immigrant groups in Sweden originated from Finland, Iraq, Yugoslavia, Iran and Bosnia and Herzegovina.

Sweden did not apply any transitional rules for immigrants coming from the ten new Member States with the EU enlargement in 2004. Immigration from these countries also increased, especially from Poland, Hungary and Baltic states. In 2014, the five largest groups were from Finland, Iraq, Poland, Iran and Yugoslavia (Çelikaksoy, 2016). However, in the 2016 statistics, Syria was among the five largest immigrant groups due to the current Syrian refugee crisis, the others being Finland, Iraq, Poland and Iran. Gender, age and civil status compositions vary across types of migration and countries of origin. Sweden has also been receiving the largest number of asylum applications by unaccompanied minors compared to all EU countries (Çelikaksoy and Wadensjö, 2015, 2017). Previous studies on refugee children arriving without their parents, where the majority were from Afghanistan, show that a higher proportion of this group remains in education at each age and continues in the educational system for a relatively longer period compared to refugee children who arrived in the Netherlands and Germany with their families (Crul et al., 2016; Çelikaksoy and Wadensjö, 2015). Later streaming and a relatively more flexible system in Sweden as, well as the wide availability of adult education compared to other countries, are arguably some of the reasons for the differences observed (Crul et al., 2016). Refugee students in Sweden have lower levels of compulsory school achievement compared to native students, although this difference disappears when the parental socio-economic background is taken into account in addition to neighbourhood of residence (Grönqvist and Niknami, 2017). Thus, investigating mobility patterns and the mechanisms behind these patterns is crucial.

Social policy and institutions in Sweden

Social policy and institutions underwent major changes in the country in the 1960s and 1970s; this is the period during which the sons and daughters of the immigrants who studied here grew up in Sweden. The educational system expanded quickly. Earlier, many young people left for the labour market after completing just primary school. Now, an

increasing share continues to secondary school and many more than before also continue to higher education. Earlier, boys continued to secondary school and higher education in greater numbers than girls. During these two decades the situation changed – the girls began to continue their education for more years than the boys. Schools are publicly funded in Sweden. Tertiary education is also free of charge. In addition, student aid – which is income-tested – is available for a maximum period of six academic years; the aid is partly a grant and partly a loan. In addition, several studies point to the importance of early child care and early childhood education as a means of counteracting ongoing educational disadvantage within families. These institutions are crucial in terms of early childhood socialisation, cognitive development and language skills. Child care in Sweden has been accorded high priority. Universal high-quality child care is provided, financed out of public funds and organised mainly by municipalities. The pedagogical dimension of early child care has been extremely important. What guarantees the quality are well-educated personnel with a high degree of pedagogical competence, and a pedagogical culture of preschool education that has developed over a lengthy period and that continues to develop in relation to the current needs of society.

In the first decades after the Second World War, most married women were housewives. Female participation in the labour force was low, certainly much lower than for men. That changed to a very large extent in the decades of interest for this study, the 1960s and the 1970s. Factors driving that change were a large expansion of inexpensive child care organised, as mentioned above, by the municipalities and a new income tax system with separate taxation of the spouses. Expansion of the public sector (education, health care) at the same time led to a demand for labour in occupations that mainly had a female workforce.

Data

The data come from the database Stativ, which is administered by Statistics Sweden (SCB). The high-quality register data in Sweden, where every person has a record that is a by-product of registers held for administrative purposes. The population registry is administered by the Swedish Tax Agency. The main sources of the data used are education registers and multigenerational registers, which make it possible to construct parent-child pairs. Also included is information originally collected by the Migration Board. Personal identification numbers are anonymised and cannot be observed by the researcher. The dataset at hand covers the entire population of native-born individuals between ages 16 and 65 with at least one foreign-born parent, as well as the entire population of foreign-born individuals who lived in Sweden at some point during 2003-12. The birth cohort chosen is 1958-78 for the native-born with an immigrant background; these individuals were between the ages of 25 and 54 during the observation period. Their parents immigrated to Sweden during the 1960s and 70s, which coincides with the main labour migration period. Thus the countries of origin chosen correspond to this type of immigration during this period. Only for some countries is the exact country of origin noted; for the rest there is information on groups of countries, due to an ethical measure SCB uses to avoid dissemination of too detailed information. Thus, parents' countries of origin included in the analyses are the former Yugoslavia, Turkey, Iran, Morocco and the 13 countries that joined the EU after the first 15: Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, Rumania, Bulgaria and Croatia. Since educational attainment is the key measure for the analyses in this paper, the sample is restricted to individuals whose parents have available information on educational attainment. Excluding missing information on maternal

education (6% of the sample) and paternal education (16%), there are 585 550 observations, as well as a 10% random sample for the year 2008 for the native-born population with a native background, i.e. both parents were born in Sweden. The same set of restrictions is used for the native background population. These pertain to cohort as well as excluded missing information on maternal education (8% of the sample) and paternal education (14%). These restrictions leave a sample of 70 561. Both datasets show the educational level of the individuals and their parents in five categories: compulsory education, high school, short tertiary education, long tertiary education, and doctoral-level education.

Analytic strategy

Comparing mobility patterns for native-born individuals in immigrant versus native families helps to understand whether the role of institutions and family background vary across these two groups, and whether their intergenerational transmission patterns differ. The choice of educational over earnings transmission is explained by the former's reliability in measuring parent-child pairs for the entire population of interest. Also, it is not possible to observe the parents at ages when they were active in the labour market with the data available. However, as it is of interest to investigate both outcomes for the groups, the chapter looks at employment rates and occupational categories by maternal education, in order to have an idea of the groups' situation in the labour market in relation to the mother's education level. Furthermore, since neither detailed educational categories nor the length of studies for the parents of the random sample with the native background are available, the chapter employs educational categories without transforming them into number of years. It thus provides a crude absolute measure for these categorical outcomes through cross-tabulation tables for the parent-child pairs and subsequent comparison of offspring with native and immigrant backgrounds. The measure's sensitivity to differences in the marginal distributions of education for the two generations is addressed by testing the correlation between the educations of the parent-child pairs. This is done through use of Kendall's tau, which is the appropriate correlation measure between two ranked discrete variables.

Results

Table 5.1 shows the highest educational attainment of sons and daughters according to five educational categories, broken down by foreign and native backgrounds. The group of origin countries selected for this chapter is referred to as +13 since they are the last 13 countries that joined the EU, even though they were not part of the EU during the time frame of the parents' immigration to Sweden. Since these countries appear as a group, it is not possible to identify each country of origin. The +13 group represents 68% of the mothers and 66% of the fathers in the SCB study, whose other countries included the former Yugoslavia (24% of mothers and 25% of fathers); Turkey (6% and 7%, respectively); Iran (1% and 1%); and Morocco (1% and 2%).

Table 5.1. Highest educational attainment of native-born offspring with immigrant and native parents

2003-2012, percentages

	Immigrant parents		Native parents	
Education	Sons	Daughters	Sons	Daughters
Compulsory education	11	8	8	5
High school	49	45	53	44
Short tertiary	10	7	7	6
Long tertiary	28	39	30	44

Source: All tables are the author's own calculations based on Stativ data as described above in section "Data".

Those who immigrated from Iran and from the +13 countries in the period of interest for this study were mainly refugees, and those immigrating from the former Yugoslavia, Turkey and Morocco were mainly labour migrants (or relatives of persons who had earlier arrived as labour migrants).

Table 5.1 shows that those with an immigrant background are more likely to complete only compulsory school education compared to those with a native background. The difference is 3 percentage points on average for both males and females. In the case of both immigrant and native backgrounds, females are more educated than males. Among those with an immigrant background, 47% of daughters as opposed to 40% of sons have reached a higher level of education than high school; the figures are 51% for daughters and 38% of sons for those with a native background. This trend of girls outperforming boys both in terms of grades and in length of education is seen in most OECD countries. Some of the explanation regarding grades is related to reading: girls tend to read longer hours than boys outside the classroom. There is also some evidence in Sweden that there is a larger gap between teachers' evaluations on the one hand and test scores on the other for girls and non-native students compared to boys and native students (Lindahl, 2007). This could be due to the fact that female and non-native students have a harder time reflecting their real knowledge and potential in the tests and the teachers compensate for this, or it could be a result of positive discrimination. However, girls outperform boys in test scores other than those that involve teacher evaluations.

Now turning briefly to the labour market situation in relation to the parents' education, Table 5.2 shows employment rates of sons and daughters by level of maternal education for the year 2008. Overall, the employment rate is lower for those whose mothers have only compulsory-level education, except for sons whose mothers are native-born. Female employment rates are lower than those of sons in the case of both immigrant and native backgrounds, but increase with the level of education of the mother. However, these differences are small. The lowest level of employment is observed for daughters with an immigrant background, especially where the mother has the lowest level of education. Low levels of maternal education do not seem to play a role in the employment rate of sons with a native background, thus indicating that it does not seem to be a disadvantage – at least in terms of finding a job. Looking at occupational categories however, the disadvantages become clearer.

Table 5.2. Employment rates of sons and daughters

By maternal education and immigration background, 2008, percentages

	Immigrant parents		Native parents	
Mother's education	Sons	Daughters	Sons	Daughters
Compulsory education	86	82	92	87
High school	88	86	92	88
Short tertiary	88	88	93	90
Long tertiary	90	86	92	90

Source: All tables are the author's own calculations based on Stativ data as described above in section "Data".

Table 5.3 shows detailed categories of occupations for sons and daughters who were employed in 2008 by maternal level of education in relation to parental background. There is a clear pattern of occupational gender segregation regardless of maternal education or parental background. It can be seen that a lower proportion of females are in management positions compared to males, and a higher proportion are in service, care and sales occupations when compared to males. The situation is similar for the construction and manufacturing sector, with an even more striking gender gap. It is also clear that the offspring's occupations are highly correlated with the mother's level of education. Around 50% of the offspring whose mothers have long tertiary education are in management positions or have work that requires specialist knowledge. In the case of mothers with a doctoral degree this figure is 62%: 55% for sons and 69% for daughters with an immigrant background, and 59% and 66% respectively for sons and daughters with a native background. On the other hand, in the case of mothers with only compulsory-level education, a higher proportion of the offspring are in unskilled jobs: 19% in the case of sons with an immigrant background and 26% of sons with a native background. Table 5.3 also shows that among sons whose mothers had only compulsory education, 41% of those with an immigrant background and 35% of those with a native background have managerial jobs, work that requires specialist knowledge, or work that requires higher education.

Table 5.3. Occupations of native-born sons and daughters of immigrants

By maternal education and immigration background, 2008, percentages

(a) Immigrant parents

	Sons					Daughters				
	Mother's education					Mother's education				
Occupations	Compulsory education	High school	Short tertiary	Long tertiary	PhD	Compulsory education	High school	Short tertiary	Long tertiary	PhD
Military work	0	1	1	1	0	0	0	0	0	0
Management	8	9	13	12	13	4	5	8	6	6
Work that requires specialist knowledge	14	19	31	40	42	15	22	34	43	63
Work that requires higher education	19	23	24	23	21	22	24	26	26	21
Office and customer service work	6	5	4	3	4	15	14	11	8	5
Service, care, and sales work	11	9	7	6	7	29	24	14	11	6
Work in farming, gardening, forestry, and fishing	1	1	1	1	1	0	1	0	0	0
Unskilled labour in construction or manufacturing	13	13	8	4	1	1	1	1	1	0
Machine operator work, transport work, etc.	19	13	7	5	3	5	3	1	1	0
Work without special training requirements	6	4	2	2	3	6	4	2	2	0
Unknown	3	3	3	3	5	3	3	2	2	0

(b) Native-born parents

	Sons					Daughters				
	Mother's education					Mother's education				
Occupations	Compulsory education	High school	Short tertiary	Long tertiary	PhD	Compulsory education	High school	Short tertiary	Long tertiary	PhD
Military work	0	1	1	1	0	0	0	0	0	0
Management	6	6	8	9	9	3	4	4	5	8
Work that requires specialist knowledge	12	17	30	41	50	15	21	34	47	58
Work that requires higher education	17	21	23	23	22	22	25	29	26	15
Office and customer service work	5	5	4	4	5	13	12	10	7	6
Service, care, and sales work	9	9	8	7	6	33	29	17	10	8
Work in farming, gardening, forestry, and fishing	2	2	1	1	0	1	1	1	0	1
Unskilled labour in construction or manufacturing	21	18	11	6	2	2	1	0	1	0
Machine operator work, transport work, etc.	21	17	9	6	3	5	3	2	1	1
Work without special	5	4	2	2	1	6	4	2	1	1

training requirements										
Unknown	2	2	1	2	2	1	1	1	1	2

Source: All tables are the author's own calculations based on Stativ data as described above in section "Data".

These differences could indicate a higher degree of mobility for those with an immigrant background. However, a lower proportion with an immigrant background in this group, that is, those with a mother who has compulsory education, is actually employed, so this could be a more selected group, those who were able to find jobs. Overall, around 40% of those whose mothers have only compulsory education are in management positions, work that requires specialist knowledge or work that requires higher education. This figure is 41% for those with an immigrant background for both sons and daughters, and 40% for daughters with a native background. Also, it must be remembered that the highest proportion of employment is observed for sons with a native background in the group whose mothers have only compulsory education.

Table 5.4 shows the educational attainment for sons and daughters whose mothers have at most compulsory school education. We can see that sons with an immigrant background are the largest group among those reaching no more than compulsory education. This could indicate a lasting disadvantage for immigrants' sons. In contrast, daughters with a native background more frequently reach higher levels of education. There is, more generally, an indication of greater mobility for daughters compared to sons regardless of their background. Around 29% of daughters with a mother who only has compulsory education have completed long tertiary education compared to sons, at around 18%. Overall for those with a mother with only compulsory level education, 28% of sons and 35% of daughters with an immigrant background, and 24% of sons and 34% of daughters with a native background, have tertiary education or higher.

Table 5.4. Educational attainment of sons and daughters whose mothers had only compulsory level education

2003-2012, percentages

	Immigrant parents		Native parents	
Education	Sons	Daughters	Sons	Daughters
Compulsory education	15	10	13	8
High school	58	56	64	57
Short tertiary	8	6	6	5
Long tertiary	19	28	17	29
PhD.	1	1	1	0

Source: All tables are the author's own calculations based on Stativ data as described above in section "Data".

These results are consistent with the general finding that girls outperform boys in terms of grades as well as length of studies. However, the results also show that this represents a higher degree of educational mobility for girls given maternal education. Furthermore, in the case of those with an immigrant background, there is a possible indication of both a higher degree of persistent disadvantage as well as a higher degree of mobility when compared to natives whose mothers have the same level of education. While one cannot draw conclusions from a descriptive table, it is important to investigate whether these differences are due to performance or decisions regarding further education *given* performance, in addition to investigating the mechanisms behind each pathway. The

discussion now turns to the issue of intergenerational transmission of education from parents to their offspring in a more formal way, via the next tables.

Looking at Kendall's tau for the correlation of educational attainment between the parent and the child in Table 5.5, it is clear that intergenerational educational transmission between all family member pairs is significant and positive for those with native and immigrant backgrounds. This shows that there is a significant and moderate positive relationship between the educational attainment of parents and their children. Comparing those with an immigrant and a native background, the strength of the relationship is slightly lower for those with an immigrant background. The results thus suggest a slightly lower level of ongoing disadvantage for those with an immigrant background, a finding Sweden in fact shares with other countries such as Canada and Germany (Eriksson, 2006; Niknami, 2012; Aydemir, Chen and Corak, 2009; Dustmann, 2005; Borjas, 1992; Card, DiNardo and Estes, 2000; Gang and Zimmerman, 2000). These results accordingly indicate a higher degree of mobility in the case of immigrant families compared to native families.

Table 5.5. Correlation between the educational attainment of parents and their children

2013-2012, Kendall's rank correlation coefficient

	Immigrant parents	Native parents
Mother-daughter	0.23***	0.27***
Mother-son	0.22***	0.28***
Father-son	0.23***	0.30***
Father-daughter	0.21***	0.25***

Note: Immigrant parents include one or two parents born abroad. *** indicates significance at the 1% level, and ** and * at the 5% and 10% levels, respectively.
Source: All tables are the author's own calculations based on Stativ data as described above in section "Data".

However, the patterns could vary by country of origin for those with an immigrant background. Furthermore, as discussed in Trejo and Duncan (2011), intergenerational transmission patterns depend to a great extent on family composition – that is, whether both of the parents were born abroad or one of the parents is native-born – and the real patterns could be misrepresented if the family types are not analysed in detail. Table 5.6 therefore shows the country of origin of the parents, which proves a variable that introduces wide variation in composition. It can be seen that a large proportion of those with a mother or father from +13 countries and Iran have a native-born parent. In contrast, of those with a mother from Turkey only 3% have a native-born father; 91% have a father also from Turkey. That figure is 79% and 86% respectively for the former Yugoslavia and Morocco. What follows therefore is a detailed analysis of parent-child correlations for the different parental compositions.

Table 5.6. Family composition

By country of origin, 2003-2012, percentages

Mother	Sweden (native-born)	Same as spouse	Other
+13	62	27	11
Former Yugoslavia	10	79	11
Turkey	3	91	6
Iran	51	42	7
Morocco	7	86	7
Father			
+13	71	21	8
Former Yugoslavia	30	60	10
Turkey	24	67	9
Iran	73	16	11
Morocco	60	26	14

Source: All tables are the author's own calculations based on Stativ data as described above in section "Data".

The detailed correlations in Table 5.7 show that the ethnic composition of the parents plays a role in the transmission of education. The table indicates that there is a higher degree of mobility for those families in which both parents were born abroad. There is little evidence in the literature with regard to how children from mixed backgrounds fare in the Scandinavian countries, and the international evidence is mixed. Ramakrishan (2004) and Chiswick and DebBurman (2004) find that the native-born with mixed parentage have better educational outcomes than those who have two foreign-born parents in the United States, while Furtado (2009) finds the opposite. Hoge and Petrillo (1978) find that children from mixed backgrounds have a weaker educational inheritance compared to children from two foreign-born parents. On the other hand, in terms of educational inheritance our results show that children from foreign-born unions have weaker persistence in terms of educational attainment, suggesting a higher degree of educational mobility in foreign-born households. This could be due to positive selection into intermarriage noted in previous studies, where immigrants from the higher end of the educational distribution tend to intermarry (Kantaravic, 2004, Nekby, 2010). Since previous findings show that there is a higher degree of educational mobility for those families who are at the lower end of the educational distribution, these results could partly be reflecting a higher degree of educational mobility for those families at the lower end of the educational distribution.

Table 5.7. Correlation between the educational attainment of parents and their children

By family pairs and household composition, 2003-2012, Kendall's rank correlation coefficient

	Immigrant parents			Native parents
	All	Both parents born abroad	One parent born abroad	
Mother-daughter	0.23***	0.19***	0.25***	0.27***
Mother-son	0.22***	0.17***	0.26***	0.28***
Father-son	0.23***	0.18***	0.25***	0.30***
Father-daughter	0.21***	0.17***	0.22***	0.25***

Note: *** indicates significance at the 1% level, and ** and * at the 5% and 10% levels, respectively.
Source: All tables are the author's own calculations based on Stativ data as described above in section "Data".

The discussion therefore turns to the detailed educational attainment of parents and their children for all sub-categories. This is done to have an idea of the educational outcomes of the different groups. It is not possible to use the length of education for analytic purposes, since this information is not available for the native-born parents in the data set that we have. However, the length of education has been computed from detailed educational categories and from the information on the length of each study for the native-born population as well as for the foreign-born parents, which can be seen in Table 5.8.

Table 5.8. Years of education

By country of origin and parental composition, average years of education, 2003-12

(a) Native-born with two foreign-born parents

Parental country of origin	Mother	Daughter	Father	Son
EU +13	10.07 (2.58)	12.72 (2.28)	10.67 (2.78)	12.30 (2.34)
Former Yugoslavia	9.27 (2.34)	12.57 (2.12)	9.99 (2.32)	12.12 (2.05)
Turkey	8.25 (1.84)	12.14 (2.10)	9.02 (2.25)	11.52 (2.24)
Iran	12.82 (2.49)	14.49 (2.41)	13.65 (2.77)	13.63 (2.68)
Morocco	8.75 (1.90)	13.01 (2.30)	9.41 (2.44)	12.09 (2.31)

(b) Native-born with one foreign-born parent

Parental country of origin	Mother	Daughter	Father	Son
EU +13	11.05 (2.76)	13.01 (2.31)	11.71 (2.86)	12.59 (2.39)
Former Yugoslavia	10.54 (2.71)	12.93 (2.16)	10.66 (2.47)	12.34 (2.26)
Turkey	11.52 (3.16)	13.34 (2.28)	10.85 (3.00)	13.58 (2.20)
Iran	13.77 (3.31)	14.77 (2.59)	13.75 (2.70)	13.31 (2.48)
Morocco	12.43 (2.73)	14.32 (2.49)	10.89 (2.61)	11.39 (2.05)

(c) Native-born with two native-born parents

Parental country of origin	Daughter	Son
Sweden	13.13 (2.14)	12.57 (2.18)

Note: Standard deviations are reported in italics in parentheses.
Source: All tables are the author's own calculations based on Stativ data as described above in section "Data".

These results show that both sons and daughters of mixed parents from all countries of origin analysed in this study have more years of education than those whose parents were both born abroad, except for sons of mothers from Iran and Morocco. Further, the middle table shows that mothers from all foreign countries of origin who have a native spouse have more years of education when compared to the upper table, that is, those who have a foreign-born spouse. Again this suggests a higher degree of educational persistence among the more highly educated families, and a higher degree of mobility for families with lower levels of education – a highly desirable situation. This is consistent with previous findings for Sweden pointing to the nonlinear relationship between the education of parents and their children (Niknami, 2012). Mothers from Turkey who have a native spouse have 3.27 years' longer education on average than mothers from Turkey who have a foreign-born spouse. This figure is 3.68 and 1.27 for mothers from Morocco and the former Yugoslavia, respectively. In the case of Iran and +13 countries, these figures are 0.95 and 0.98. It can be seen that for countries where intermarriage is common, the gap across household types in years of education is smaller. On the other hand, the education gaps between household types are larger for countries where intermarriage is very rare, thus reflecting a higher degree of selection. Only 3% of the mothers from Turkey and 7%

of mothers from Morocco have a native-born spouse. The selection dynamic in these unions can partly be explained by women having to attain high education levels to cross stronger cultural barriers, but also by their having to achieve these levels to counteract discrimination in the marriage (Çelikaksoy, Nielsen and Verner, 2006; Çelikaksoy, 2016).

Foreign-born fathers who have a native-born spouse also have more years of education than those with foreign-born spouses, but fewer years than in the case of mothers. Another important finding here is that for all countries of origin and for both family types, daughters have more years of education than sons, with one exception – the daughters of mothers from Turkey who have native-born spouses. It can also be seen that both daughters and sons of mixed households have more years of education than those who have a fully native background for all countries of origin, except for sons of mothers from Morocco; which might indicate positive selection in the case of native parents as well.

Table 5.9 shows intergenerational educational mobility patterns for all the groups analysed, revealing positive and significant educational transmission for all groups and for both household types. However, daughters from Iran and Morocco whose parents are both foreign-born stand out in their mobility patterns. Correlations of the education levels of mothers and daughters from these two countries are not significant, indicating that there is no significant relationship. Indeed, Table 5.8 showed that for those who have foreign-born parents, daughters with a background from Iran and Morocco have the longest years of education. Furthermore, father-daughter correlations for those from Morocco are significant only at the 10% level. In addition, the mother daughter correlation for those with a mother from Iran and a native-born father is significant at the 5% level. The indication is that daughters of immigrants from Morocco and Iran are the groups with the highest mobility patterns.

Table 5.9. Correlation between the educational attainment of immigrant parents and their native-born children

By country of origin, family pairs and household composition, 2013-2012, Kendall's rank correlation coefficient

Parental country of origin	Two foreign-born parents	One foreign-born parent
EU+13		
Mother-daughter	0.16***	0.26***
Mother-son	0.15***	0.27***
Father-son	0.20***	0.25***
Father-daughter	0.17***	0.22***
Former Yugoslavia		
Mother-daughter	0.14***	0.20***
Mother-son	0.10***	0.19***
Father-son	0.10***	0.15***
Father-daughter	0.11***	0.15***
Turkey		
Mother-daughter	0.18***	0.50***
Mother-son	0.14***	0.26***
Father-son	0.09***	0.29***
Father-daughter	0.12***	0.27***
Iran		
Mother-daughter	0.02	0.24**
Mother-son	0.18***	0.51***
Father-son	0.14***	0.17***
Father-daughter	0.17***	0.21***
Morocco		
Mother-daughter	-0.03	0.69***
Mother-son	0.15***	0.76***
Father-son	0.11***	0.15***
Father-daughter	0.05*	0.15***

Note: Only families in which both parents are foreign-born are included.
Source: All tables are the author's own calculations based on Stativ data as described above in section "Data".

As discussed before, an overall explanation for the lower degree of educational transmission for families with a foreign background compared to families with native or mixed backgrounds could be that the parents in these households tend to have lower levels of education, and so there is a higher degree of mobility in the lower end of the educational distribution. This is, as noted before, an ideal case, and previous studies have pointed to such cases in Sweden. However, the results from Iran show that this is not the only explanation, since mothers from that country have the highest level of education regardless of household type.

Thus, the findings for Moroccan and Iranian families with an immigrant background provide examples of two household types with higher and lower educational levels. Moroccan mothers in these households have the shortest years of education, whereas Iranian mothers in these households have the longest. However, in both cases the daughters in these households have the longest years of education. That might reflect certain value systems and attitudes towards educational attainment in these households or

ethnic groups that are gender-specific. Further qualitative research could shed light on the specific mechanisms that lead to higher degrees of upward educational mobility in certain groups.

Conclusion

Intergenerational mobility means that the disadvantages of parents will not find their way into the lives of their children, while intergenerational persistence signifies that parental disadvantage will be passed on to the children and be reflected in their educational attainment as well as labour market position and earnings, with inequalities persisting over generations. This chapter has discussed mobility patterns with regard to the labour market and education focusing on Sweden. The country provides an especially interesting case study in terms of mobility patterns due to its publicly funded policies supporting individuals and families in a variety of ways. Public insurance and health care, free education and a comprehensive system of support for families with young children are parts of these social welfare policies, the aim of which is to equalise living conditions among households. Thus, Sweden has been found to have a higher degree of mobility in the labour market with regard to earnings as well as occupations when compared to non-Scandinavian countries.

However, an important question is whether these social policies have a similar influence across different groups within society. Thus there have been an increasing number of international studies comparing immigrant and native families with regard to their mobility patterns in the labour market.

Overall, the Swedish income distribution is considerably more compressed than the US income distribution, and Sweden is considered a country with high levels of intergenerational income mobility. However, there are substantial differences across Swedish local labour markets. In fact, Heidrich (2015) finds that upward mobility varies greatly across these markets and that location matters: there can be especially large differences in outcomes for children from the lower end of income distribution depending on the region. Furthermore, the results here draw attention to the importance of detailed analyses within groups as well as across groups in relation to several categories. For instance, although a larger proportion of sons with an immigrant background whose mothers have only compulsory-level education are not in employment, a higher proportion of all those who are employed are in occupations requiring higher qualifications when compared to sons with a native background. Although this can partly be explained by selection into employment, detailed knowledge of the mobility pathways for different groups would increase our understanding of the mechanisms that facilitate or hinder mobility for different types of households. The results further show that a large proportion (15%) of sons with an immigrant background whose mothers have only compulsory school education also attain only a compulsory level of education. On the other hand, this group also has a higher proportion continuing with tertiary education when compared to native sons for those whose mothers have the same low level of education. Thus, there is a need for further analyses investigating factors that influence mobility in much greater detail.

Prior Swedish studies that analysed educational mobility patterns beyond simply comparing native versus immigrant families are scarce. Niknami (2012) finds that educational mobility is nonlinear, consistently finding a higher degree of upward mobility for those with less well educated parents and a higher degree of persistence at the higher end of the parental educational distribution, in principal an ideal case. That is, while the

well-educated manage to pass on their advantage to their children, the less educated have children that tend to outperform their parents. Factors found to play a major role are streaming in the educational system, early school entry, and greater access to preschool and kindergarten programmes (Bauer and Ripahn, 2013). Thus, the provision of publicly funded universal child care, a publicly funded educational system that includes tertiary education, the availability of student aid and a flexible system where one can continue to tertiary education from all lines of high school are social policies in Sweden that work towards increasing the mobility for disadvantaged groups.

The relatively open meritocratic school system in Sweden, with its late and less selective streaming system, offers a flexible structure to continue to post-secondary and higher education. In addition, additional support for children who need it that is part of the regular educational system is an important factor that facilitates mobility; such additional support takes forms such as a support teacher and extra language courses. However, even though the differences appear to be smaller in Sweden compared to other countries, they are still substantial across municipalities and local communities within the municipalities in terms of school quality and neighbourhood characteristics, including with respect to residential segregation.

The findings here demonstrate that there is a significant and positive correlation between parent-child pairs, pointing to moderately persisting educational attainment for those with a native or immigrant background. The results also demonstrate that intergenerational transmission of education is weaker within immigrant families than within native families. This is a common finding for Sweden as well as for other countries, suggesting a higher degree of mobility for immigrant families. The majority of studies analysing mobility patterns study father-son pairs; this chapter looks at all family combinations, including mothers and daughters. There can also be differences across countries of origin for those families with an immigrant background, and so all groups of interest are analysed separately. Furthermore, previous studies suggest that family structure is likely to play a role in transmission mechanisms; here, transmission patterns are also investigated separately for different household types with regard to parental composition.

The results show that native-born sons and daughters in immigrant families have slightly lower education levels compared to those with a native background for the selected groups of immigrants: on average, 0.14 fewer years for daughters and 0.24 fewer years for sons. It is the opposite case for families with a mixed background, where one parent is foreign-born and the other native-born. Daughters of mixed parentage have 0.54 more years' education on average than daughters with a fully native background, whereas this figure is 0.07 years in the case of sons. Another important result is that daughters in all family types and from both immigrant and native-born backgrounds have higher educational attainment than sons. They also have more years of education than their mothers and fathers, and thus have the highest educational attainment in the family. In terms of intergenerational transmission, in decomposing the group of families with an immigrant background into mixed versus a fully immigrant background, the results for mixed families mimic those of the native families to a large extent. In the case of families with a fully immigrant background, transmission of educational attainment is weaker not only for fathers and sons but also for all family pairs, thus implying a higher degree of mobility for this group.

Furthermore, when looking at the educational transmission patterns by country of origin, it can be seen that varying patterns emerge with regard to educational persistence across countries of origin, parent-child pairs and family type. In particular, in families where

both of the parents are born abroad, where the mothers are from Iran or Morocco there is no systematic relationship between the educational attainments of mothers and daughters. Those results imply upward mobility especially for daughters in these families. Overall, the results in relation to the labour market as well as educational mobility show that there are varying patterns both within and across the different groups that cannot be explained by broad analyses. Although national policies to facilitate equality and mobility patterns are crucial, further in-depth knowledge is required with regard to the specific pathways that lead to mobility or persistence, especially for the disadvantaged groups, to create more effective and efficient support systems.

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Chapter 6. The European Union: Entrenched disadvantage? Intergenerational mobility of young natives with a migration background

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This chapter asks whether and why disadvantage might become entrenched for some groups of natives with a migration background. Using the ad hoc module of the 2014 European Union Labour Force Survey, it compares the over- and underrepresentation in occupational levels of children of immigrants from different origins. In light of prior research, it goes on to pursue possible lines of enquiry to account for entrenchment of disadvantage, demonstrating that it cannot be explained solely by low socio-economic origins. Other potential factors such as differential minority/majority rates of intergenerational mobility, perverse fluidity and replenishment from the countries of origin, grandparental influences and discrimination are then considered. The discussion concludes with a description of the characteristics needed for a data set to eventually furnish conclusive answers.

Main findings

- Entrenched disadvantage, i.e. one that is persistent across generations, remains a worrying possibility among native-born with immigrant parents in Europe, at least for some disfavoured groups such as those of North African and Middle Eastern origin. In Austria, Belgium, Greece, Italy and Sweden, one or the other of these groups is overrepresented in the most disadvantaged social class (unemployed and low skilled) and underrepresented in the most advantaged social class (the salariat).
- It is doubtful that this entrenchment can be explained solely by the low initial starting points of the immigrant parents. It is instead likely that additional processes such as perverse fluidity, three-generational processes, replenishment and discrimination all play a part.
- There are a number of possible lines of enquiry for exploring why disadvantage may become entrenched among particular groups, including low initial starting points, replenishment from the countries of origin, differential rates of relative intergenerational mobility, perverse fluidity, three-generational processes and discrimination. At present it is impossible to quantify reliably both the scale and incidence of the entrenched disadvantage, or the relative importance of the different explanations. Much better data than available at present are needed in order to chart dynamic processes over time and generations, as well as much better monitoring of the situation in order to understand the nature and scale of the problem.

Introduction

There is accumulating evidence that in Europe, young natives with immigrant parents are overrepresented in disadvantaged positions in the labour market. This is by no means true of all groups with a migration background or in all countries, but it does raise worrying questions about the possible entrenchment of disadvantage in the labour market. That could potentially create a form of ethnic stratification alongside the more usual patterns of class stratification. "Ethnic stratification" is here used to describe a situation where some groups with a migration background are disproportionately concentrated in lower levels of the class structure as a direct or indirect consequence of their group membership (or of their assumed membership). In other words, these minorities may experience enduring "ethnic penalties" over and above any disadvantages deriving from their social class origins, lack of human capital, and the like.

This can be contrasted with a situation where ethnic distinctions lose their relevance for processes of socio-economic attainment, and where stratification processes operate in exactly the same way for minorities as they do for the majority group. Patterson has powerfully described the different modes of what he terms "ethno-somatic stratification" operating in Europe and the Americas, where he highlights the strong stratification that has persisted in some parts of the Americas long after the Emancipation Proclamation (Patterson, 2005).

A situation of enduring disadvantage from generation to generation for some groups of natives but not others raises questions about the extent to which there is a level playing field for natives with a migration background. If socio-economic processes operate differently for minorities and the majority group, then it is possible to talk of inequality of

opportunity. This will potentially have major implications for social mobility, wastage of talent, social injustice and ultimately for social integration and social order.

However, it is important to recognise that overrepresentation of immigrants in disadvantaged positions is not in itself surprising, and indeed may not necessarily indicate inequality of opportunity. Many immigrants, especially migrants coming from less developed non-European countries, will have low levels of education and human capital, low familiarity with the language of the country of destination, and/or little knowledge of the workings of western labour markets. Their initial situation in the host society is therefore likely to be a disadvantaged one, relative to that of the better-educated majority group (although not necessarily disadvantaged relative to that of non-migrants who remained in the country of origin). One would expect the children of immigrants to have better outcomes than their parents, and indeed there is evidence of substantial upwards intergenerational mobility for these children from their parents' low positions in the countries of destination (Li and Heath, 2016; Algan et al., 2010).

In the normal course of events, if descendants of immigrants experience the same rates of relative mobility as do natives without a migration background, one would also expect that the occupational positions of natives with a migration background would gradually come to approximate the distributions of natives without a migration background. That may take several generations, but in open societies with equality of opportunity one would not expect those with a migration background to remain grossly overrepresented in lower levels of the labour market, including for persons born in the country (Alba and Nee, 2003). Convergence is expected to be quicker in more socially mobile societies such as Canada, where relative rates of intergenerational mobility are fairly equal for people from different social class backgrounds, and it would be slower in less socially mobile societies such as Germany. But since there is a considerable degree of fluidity even in the least mobile European societies, one would nonetheless expect to see the extent of disadvantage of the descendants of immigrants in Europe gradually diminishing in all countries of destination. (For research on relative and absolute rates of social mobility in Europe, see Ganzeboom, Luijkx and Treiman, 1989; Breen; 2004; and Bukodi, Paskov and Nolan, 2017.)

The central question, then, is whether socio-economic disadvantage may become entrenched for minorities with a migration background, and if so, what processes might be responsible for any such entrenchment.

The evidence is not nearly as strong as one would think, because the kind of data needed is not routinely collected. However, as will be shown, the possibility must be taken seriously that in some countries, particular groups with a migration background may remain overrepresented at lower levels of the labour market many years after the initial migrations of these groups. This does not appear to hold equally true in all countries or for all groups. The picture is very much a differentiated one, with much more marked disadvantage experienced by some minority groups than by others.

Over- and underrepresentation in different social classes

The issue can be illustrated using the ad hoc module of the 2014 European Union Labour Force Survey (EU-LFS). Figure 6.1 compares the over- and underrepresentation in different occupational classes of adults born in the host country to at least one immigrant parent from different national origins. Note that these data are far from ideal because of small sample sizes. Ideally we would look at people both of whose parents were

immigrants, as this might well show greater disadvantages. However, this would reduce sample sizes too much. Furthermore, the grandchildren of immigrants (the "third generation") are invisible in the data, and so are classified as natives without a migration background in the EU-LFS. A definitive test of the hypothesis requires that grandchildren and great-grandchildren be distinguished in order to see whether convergence is occurring across generations. Since large numbers of labour migrants first began arriving in developed European countries in the 1950s and 1960s, substantial numbers of grandchildren and great-grandchildren will now be present in some countries. Nevertheless, the EU-LFS helps indicate which countries pose the highest risks of enduring disadvantage for which origin groups.

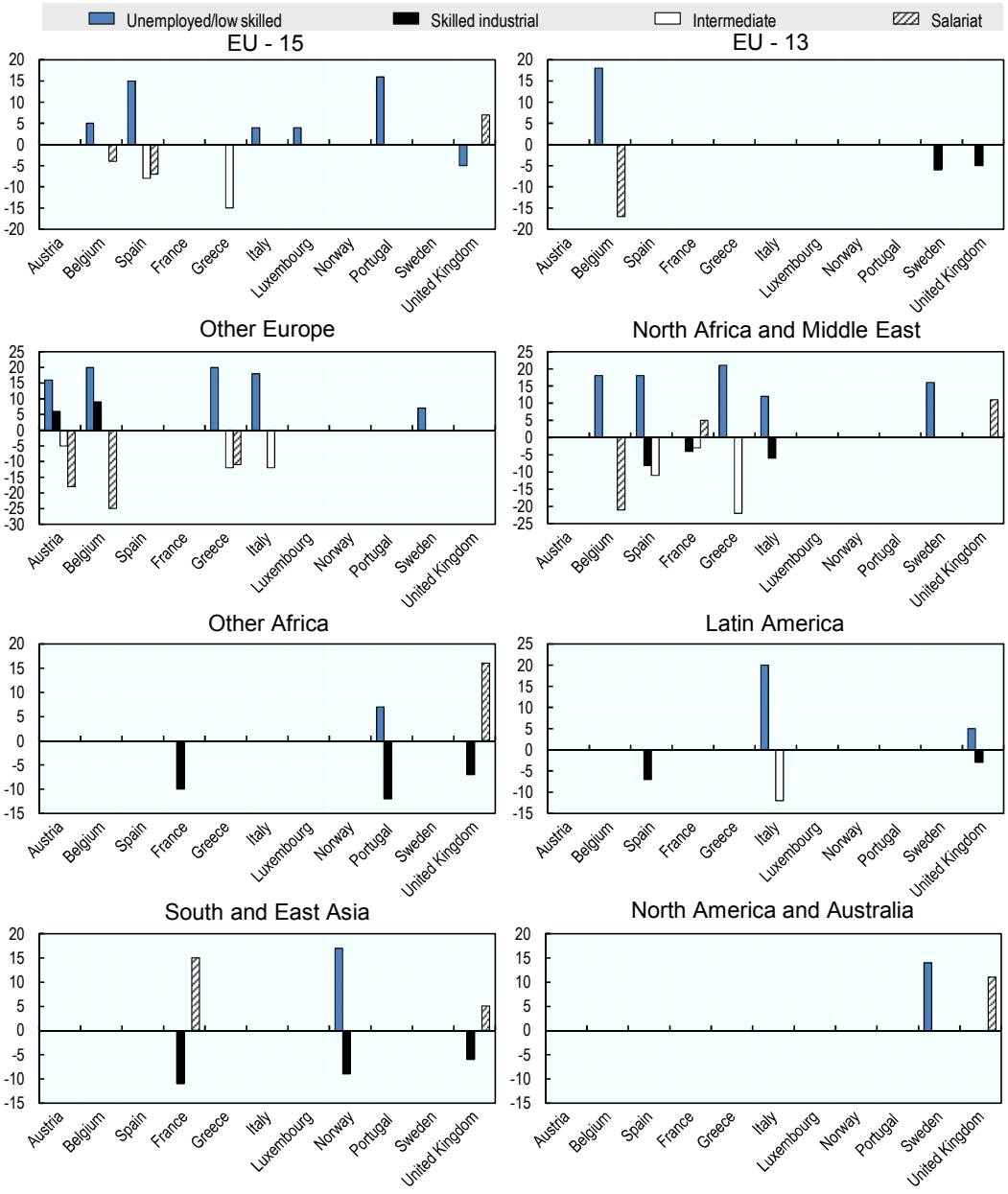
Because of the very small sample sizes, we are not able to take account of the fact that different waves of migrants arriving at different times may have different characteristics and experiences in the labour market. Small sample sizes also mean that we cannot analyse particular national origins but need to construct broad regional groupings (based on the country of birth of the mother or that of the father if the mother was born in the country of residence or her information was missing). The groupings are as follows:

- EU-15
- EU-13 (the Member States that joined in 2004 and after)
- Other Europe (including Turkey)[2]
- North America and Australia
- North Africa and Middle East
- Other Africa
- East Asian and South Asian countries (including Pakistan)
- South and Central America (including the Caribbean)

A condensed version of the European Socio-economic Classification (based on ISCO and employment status, and designed to harmonize different socio-economic indices) is used to define labour market positions. We exclude the economically inactive as the drivers of inactivity are rather different from those of occupational attainment. We also combine unemployment with low-skilled work (employees working in personal services or sales, agricultural work and elementary occupations) in the first, most disadvantaged category since both categories are highly disadvantaged in terms of income and security, and because there is considerable movement between the two categories. The second category is that of skilled industrial workers, consisting of employees in crafts and related trades (such as building, metal, electrical work or food processing) and employees working as plant and machine operators and assemblers. The third group is an intermediate group, comprising small entrepreneurs as well as clerks and employees carrying out skilled service work. The final category consists of those in technical, professional and managerial positions that tend to be the most advantaged in terms of pay, working conditions and security. The term used for this last category is the salariat.

Figure 6.1. Over- and underrepresentation at different occupational levels of natives with at least one immigrant parent compared to natives with native parents, eleven European countries, by the parent's country of origin

Difference in percentage points



Notes: Men and women combined, economically active respondents aged 15-59. Differences shown are statistically significant at p<0.05 and based on a cell size>=20. Non-significant differences are not shown.
Interpretation: Positive bars (rising above the horizontal) show overrepresentation whereas negative bars (dropping below the horizontal) show underrepresentation.
Source: European Union Labour Force Surveys (EU-LFS) and its Ad-Hoc Module (AHM), 2014.

Figure 6.1 shows the extent to which natives with immigrant parents from these eight broad regional groupings are over- and underrepresented at different occupational levels

in the countries participating in the ad hoc module. The positive bars (above the horizontal) show overrepresentation whereas the negative bars (below the horizontal) show underrepresentation. The only bars shown are those where the degree of over- or underrepresentation is statistically significant at the 0.05 level.

The clearest picture is for natives with "Other European" and with "North African and Middle Eastern" backgrounds. Here it can be seen that in Austria, Belgium, Greece, Italy and Sweden, one or other of these groups is overrepresented in the most disadvantaged social class (unemployed and low skilled) and underrepresented in the most advantaged social class (the salariat).

Overrepresentation in disadvantaged positions and underrepresentation in advantaged ones are rare for the other main regional groupings. It appears, then, that disadvantage is not an invariable experience of all minority groups in all destination countries. It is a relatively common experience for some groups but quite rare for others. This warns us that combining all natives with a migration background into a single undifferentiated category may serve to obscure the extent to which specific groups experience entrenched disadvantage.

It should be remembered that the ability to find significant under- or overrepresentation will depend heavily on sample sizes. Many non-significant findings will be due to lack of statistical power, and thus could be regarded as "false negatives". Even with the broad regional aggregations here, some origin groups are very small. On the other hand some, such as the two EU groups, are indeed large, with large enough sample sizes to show statistically significant under- or overrepresentation. What is striking however is that it is much rarer for these groups to experience significant disadvantage than it is for the "Other European" and the "North African/Middle Eastern" groups.

In the case of Austria, Belgium and Sweden, there is previous research showing that very similar patterns held true around twenty years ago (Heath and Cheung, 2007). While the data are far from ideal, the hypothesis that these patterns of disadvantage have become entrenched certainly cannot be rejected.

It has to be emphasised, however, that Figure 6.1 shows simple descriptive differences that do not take into account differences in the initial situations of these groups, such as their immigrant parents' social class in the country of destination. These initial situations are the most obvious explanations of disadvantage. They and additional explanations are taken up in the remainder of this chapter. We should also note that, while the results in Figure 6.1 do not adjust for age, more detailed analysis indicates that the results after taking account of age differences between those with and without a migration background are closely in line with those shown here.

Reasons for entrenchment of disadvantage

There are a number of possible lines of enquiry for exploring why disadvantage may become entrenched among particular groups:

- low initial starting points
- replenishment from the countries of origin (and differential fertility)
- differential rates of relative intergenerational mobility
- perverse fluidity
- three-generational processes
- discrimination.

The next section of this chapter pursues these different lines of enquiry.

Low initial starting points

Clearly, a basic factor in explaining the patterns shown in Figure 6.1 are the starting points of the immigrant parents when they arrive in the countries of destination. If a migrant group had been initially recruited, as many of the early labour migrant groups were, to fill low-skilled vacancies in European labour markets, then this could certainly explain why their adult children are disproportionately found in low-skilled positions. This could for example explain why the children of immigrants from Turkey are disproportionately disadvantaged in the destination country's labour market: many of these Turkish labour migrants came from rural origins and had low levels of human capital. The Turkish immigrants were, in economists' terminology, negatively selected[3] and would have had little possibility of entering more advantaged positions in the salariat (Lee, 1966; Borjas, 1987; Chiswick, 1999).

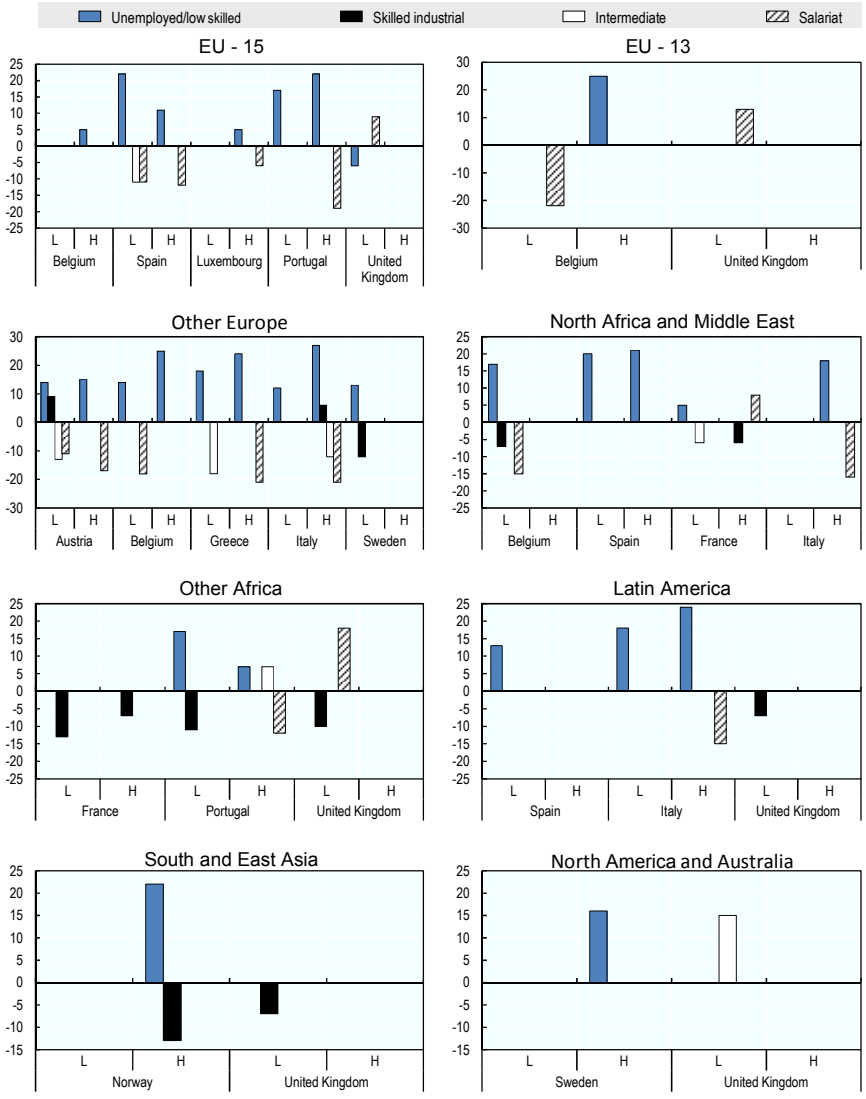
However, disadvantaged starting points would not necessarily explain why disadvantage had become entrenched over time. The guest worker programmes were generally curtailed after the oil shock of the 1970s, and criteria for immigration to developed countries gradually became more selective. It might therefore be expected that later groups of labour immigrants would not have been quite so "negatively selected" (although migrants for family reunion might not have been affected in the same way). This is of course an empirical matter, which is relatively easy to establish – recent evidence suggests that many immigrant groups, particularly those from East and Southeast Asia and from sub-Saharan Africa, are "positively selected". There are also are important differences between destination countries, with Canada, Sweden and the United Kingdom being particularly likely to have "positively selected" immigrants (Lessard-Phillips, Fleischmann and van Elsas, 2014).

Even from low initial starting points for the migrants, gradual convergence would be expected if the same patterns of intergenerational fluidity apply to immigrants' descendants as to those without a migration background. The point is simply that the lower the initial starting point, the longer the process of convergence will take, other things being equal. Thus "positively selected" groups, such as the "Other African" and "South and East Asian" groups, may show little initial disadvantage and rapid convergence with native patterns.

A key question, therefore, is whether the patterns of minority disadvantage shown in Figure 6.1 can be explained by the negative selection and low starting points of the parents who migrated to these European countries. To investigate this, Figure 6.2takes account of the level of education of the parents, distinguishing between parents with at most lower secondary qualifications and those where one or both parents had a higher, tertiary-level qualification. It then reports the extent of under- or overrepresentation at different levels of the labour market separately for those with lower- and higher-educated parents, respectively. In order to compare like with like, natives with a migration background are compared to natives without a migration background but with parents having the same level of education.

Figure 6.2. Over- and underrepresentation at different occupational levels of natives with at least one immigrant parent compared to natives with native parents, eleven European countries, by parent's country of origin and parental qualifications

Difference in percentage points



Notes: Men and women combined, economically active respondents aged 15-59, split by parental qualifications (at most lower secondary; upper secondary and above). Differences shown are statistically significant at $p<0.05$ and based on a cell size>=20. Non-significant differences are not shown. "L" stands for parents that had at most a lower secondary education; "H" stands for parents that had an upper secondary education or above. Positive bars (rising above the horizontal) show overrepresentation whereas negative bars (dropping below the horizontal) show underrepresentation.

Interpretation: In Portugal, natives whose parents were highly qualified and born in the EU-15 are significantly ($p<0.05$) more likely than their native counterparts whose parents were born in Portugal to be unemployed. They were also significantly less likely to work in the salariat. Those whose parents had lower qualifications were also significantly over-represented among the unemployed, but there was no significant difference in their chances of accessing the salariat.

Source: European Union Labour Force Surveys (EU-LFS) and its Ad-Hoc Module (AHM), 2014.

Figure 6.2 shows clearly that even when account is taken of the level of parental education, natives with immigrant parents from "Other European" or from "North African and Middle Eastern" origins continue to be overrepresented in more disadvantaged positions in the labour market, and underrepresented in more advantaged ones. The patterns of over- and underrepresentation shown in Figure 6.1 cannot therefore be explained solely in terms of the low initial starting positions of the immigrant parents.

Even more strikingly, it is clear that for some groups in some destination countries, the overrepresentation in disadvantaged positions is even greater for those with more highly educated parents. The discussion returns to this point later when it addresses what has been termed "perverse fluidity".

These results may seem surprising, as it is often assumed that labour migrants in Europe are relatively poorly educated and that this will explain, at least in part, their children's lack of success in European labour markets. However, while that may well have been true among the early labour migrants in the 1950s and 1960s, the data from the EU-LFS clearly shows that many immigrants today are highly educated. This will partly reflect the educational progress that many of the origin countries themselves have made over the past fifty years. But it will also reflect the changing labour market opportunities in the countries of destination, which have shifted to a considerable extent from an industrial to a post-industrial service economy.

Thus it is important to explore additional processes that might account for the entrenchment of disadvantage among some minority groups. The discussion turns next to the process of replenishment.

Replenishment

Replenishment refers to the continued immigration of new migrants from a given origin to join their co-ethnics in the country of destination (Jimenez, 2010; Waters, 2014). Labour migration from Turkey, North Africa, the Caribbean and South Asia started in earnest in the 1950s and 1960s, as did migration from southern European countries such as Greece, Italy, Spain and Portugal, to meet labour shortages in countries like Austria, Germany and the Netherlands. However, these migrations were not one-off phenomena; in many cases there have been continuing migrations from the same origin countries, involving family reunion or marriages between a native spouse and a migrant spouse. There has also been some return migration, which in principle should be taken into account – in migration/population data one should measure net replenishment, not simply continuing immigration from the same country of origin.

The extent to which *net* replenishment has occurred for different origin groups is in principle researchable, although data on return migration are not as plentiful as one would wish. Nevertheless, it seems likely that net replenishment has continued in many European countries at a high level among several groups, including notably from Turkey.

There are a number of ways in which replenishment could slow down processes of convergence. Perhaps most importantly, it may tend to inhibit the development of ethnic (that is, community) human capital, if newcomers arrive with relatively low levels of education. (One should not forget however that there has been rapid educational development in many of the origin countries, which have been far from static.) As Borjas (1995) has pointed out, collective human capital can play an important role in mobility chances, over and above individual characteristics. Thus grandchildren of immigrants in a replenished community may not make the same progress in terms of occupational

mobility as those in a community whose members have made greater occupational strides. Replenishment may also hamper the development of bridging social ties with the wider native-born community and thus may further weaken inter-generational progress.

Enduring low levels of collective human capital as a result of replenishment are thus expected to slow down processes of convergence. However, this does assume that the replenishment takes the form of continued low-skilled migration. If replenishment brings in migrants who are rich in human capital (which may well be happening with some origin groups), it could have the reverse effect.

Differential fertility is a closely related issue. Large family size tends to be associated with lower educational attainment. While the evidence suggests that fertility patterns tend to converge with those of natives without a migration background, replenishment could potentially slow that convergence down.

A third important factor is a differential rate of relative mobility for natives with and without a migration background. That is, if there is a stronger effect of parental social class on adult children's social class among those with a migration background than among those without a migration background, combined with low initial starting points, then this would tend to delay processes of convergence. (This would also apply in reverse to groups with higher-than-average initial starting points, who would therefore tend to remain advantaged.)

True, if this were found to be the case, then a key task would be to understand why fluidity is lower among natives with a migration background. One possibility is that groups with stronger family structures may show lower fluidity than groups with weaker family structures (for example with higher rates of marital dissolution). The role of family structure in social mobility is not well understood, but it is plausible that marital dissolution may weaken the intergenerational transmission of advantage if it means that the family of origin comes to play a weaker role in socialisation or intergenerational transmission of cognitive or material resources.

There is circumstantial evidence that family structures will vary between different origin groups. EU-15 origin groups may be expected to have similar structures to those in the countries of destination. Some origin groups from sub-Saharan Africa for example may have more extensive family commitments, and some South and East Asian traditions may encourage stronger family structures than those in more individualistic developed countries. Conversely, there are suggestions in the anthropological literature that the history of plantation economies in parts of the Caribbean and South America weakened family structures (although this has been controversial). Once again, then, merging all origin groups into a single category may hide crucial variations that could have important implications for relative mobility rates.

Perverse fluidity

Some scholars such as Michael Hout (1984) have suggested that there may be greater fluidity among African Americans, but of a perverse kind with African-American parents with higher occupational positions being disproportionately unable to pass on their advantages to their children. The children therefore experience excess downwards mobility. This kind of argument can also be applied to the situation of natives with a migration background. Indeed the evidence of Figure 6.2, which suggested that overrepresentation in disadvantaged positions may be even greater among those with highly educated parents, is consistent with the concept of perverse fluidity. A

phenomenon of this sort would therefore counteract the general expectation of convergence across generations, and could have important implications for the entrenchment of disadvantage among the groups affected.

A variety of social processes could be at the root of perverse fluidity. One important finding in mobility research is that parents in higher status positions seem to be able to protect their children from downward mobility, even if their children are less cognitively skilled and less educationally successful. The role of social ties and connections has been emphasised in explaining why elite groups are able to protect their less able members from downward mobility. Thus elite groups may be able to use their social ties and know-how to secure positions for their children where soft skills as opposed to technical skills are valuable (Jackson, 2001). However, immigrant parents may not be able to protect their children from downward mobility to the same extent. One plausible mechanism is that minority parents who have secured higher status positions in the labour market may nonetheless find themselves socially excluded from the social networks of elite sections of European society. If families with a migration background lack access to these networks and/or soft skills, they may not be able to protect their less skilled children from downward mobility in the way that their peers without a migration background can.

Three-generational processes

Social mobility researchers have increasingly become interested in the possibility that grandparents' resources might have consequences for grandchildren's occupational positions, over and above parents' positions (Chan and Boliver, 2013). In particular, grandparents from privileged positions may be able to help grandchildren's education or occupational advancement, even if their own children (the parents) have been downwardly mobile. Mobility research therefore needs to move beyond the usual two-generational approach to a three-generational approach, which could be particularly relevant to the descendants of migrants, in a variety of ways. Firstly, it appears to be the case that some immigrants are downwardly mobile on arrival in the country of destination. It may be that the children of these immigrants will experience disproportionately greater upward mobility and will tend to return to the positions that their grandparents had.

Furthermore, grandparental influences may be stronger among communities that have a three-generational type of family structure where grandparents, parents and children co-reside (a stem family structure) – as is the case for example in some South and East Asian communities – than is typical of developed countries where two-generational nuclear families tend to predominate. There seems to be little evidence on the extent of grandparental influences on the mobility trajectories of people with a migration background; however, given the importance of three-generational families in some communities, it should not be assumed that grandparental influences will be the same as in high-income OECD countries with different intergenerational cultural traditions.

To be sure, it is also possible that grandparents who remain in their country of origin may have less impact on grandchildren's outcomes in the country of destination than would be the case for natives without a migration background, where grandparents could be more likely to be on hand to help. That could explain why descendants of migrants make less progress in the labour market.

Discrimination

There is considerable evidence from field experiments that natives with a migration background experience discrimination in the labour market, and that this varies both between origin groups and between countries of destination. (For recent reviews of the literature see Pager and Shepherd, 2008; Heath, Liebig and Simon, 2013; Rich, 2014; and Schirnt and Ruedin, 2016) Meta-analyses of field experiments typically find that discrimination is significantly less against groups with a west European, Australian or North American background than against those whose origins were in Turkey, North Africa and the Middle East, or sub-Saharan Africa and the Caribbean. Discrimination therefore seems to be a plausible explanation for some of the disadvantage experienced by minorities with "Other European" and "North African and Middle Eastern" origins observed in Figure 6.1 and Figure 6.2. However, it seems less likely that discrimination will be important in explaining the disadvantages experienced by the "EU-15" and "EU-13" groups in those two figures.

One particularly worrying finding is that discrimination appears to be equally prevalent against natives with an immigration background and the immigrants themselves (Midtbøen, 2016). On theoretical grounds one might have expected that natives with an immigration background, as a result of their greater familiarity with the language and culture of the destination country and their possession of host-country qualifications, would experience lesser discrimination than their immigrant parents did. However, this does not seem to be the case in practice. Statistical evidence on ethnic penalties has also suggested that natives with an immigration background appear to experience ethnic penalties in obtaining jobs of a magnitude similar to that experienced by their immigrant parents. At the same time, occupational attainments among those fortunate enough to obtain work are closer to those of the majority group than were the attainments of their immigrant parents (see for example Li and Heath, 2016). Given the serious consequences of unemployment, both for the careers of those affected and for their children's outcomes, discrimination (or other forms of social exclusion) could be a major factor leading to entrenched disadvantage.

Conclusion

The provisional conclusion, then, is that there are serious risks of entrenched disadvantage among some, but not all minority groups. Entrenched disadvantage, of the kind that some African Americans experience in the United States after many generations, remains a worrying possibility, at least for some disfavoured groups such as those of North African and Middle Eastern origin. Moreover, it is doubtful that this entrenchment can be explained solely by the low initial starting points of the immigrant parents. It is likely that additional processes such as replenishment, perverse fluidity, three-generational processes and discrimination all play a part. Other social processes such as those involved in the educational system, housing market, and social relationships will also be important, although some of these will be endogenous, at least in part, and will be driven by occupational class and migration background.

At present it is impossible to quantify reliably either the scale and incidence of the entrenched disadvantage, or the relative importance of the different explanations. Much better data than available at present are needed in order to chart dynamic processes over time and generations. Also needed is much better monitoring of the situation in order to understand the nature and scale of the problem. Only then can it be ascertained whether the problem for particular origin groups has indeed remained entrenched both across

historical time and across generations, or whether the patterns of over- and underrepresentation shown in Figure 6.1 can be understood simply as consequences of low initial starting points for the parents allied with the same rates of social fluidity as among natives without a migration background. Since full convergence is not expected to occur within two generations, it is important to identify the grandchildren's situation and not solely that of the children of immigrants, which at the moment is simply not possible with sources such as the EU-LFS (although the ad hoc module used in this chapter is an important step forward). There is a therefore huge data gap. In the absence of better data, it must be assumed that there is a real problem that cannot simply be explained by low initial starting points.

Moreover, policy makers need a better diagnosis of the causes of the problem(s) in order to understand the nature of the challenge they face. What is the relative importance of replenishment and collective ethnic capital, differential fluidity and perverse fluidity, three-generational processes, and discrimination? Which groups are most adversely affected, and why?

The policy implications will differ considerably, depending on the nature of the diagnosis. Thus, if disadvantage among the children of immigrants is primarily due to low initial starting points, but with no differentials in rates of two- or three-generational mobility, then disadvantage will not become entrenched and the problem will largely resolve itself. In effect, this represents a benign scenario of equality of opportunity with high and similar rates of social fluidity for both those with and those without a migration background. The result will be a "shuffling of the cards" in each generation and relatively rapid convergence in occupational profiles (albeit slower convergence in less socially mobile countries). Under this benign scenario, major policy initiatives may not be needed.

In light of differential rates of relative social mobility, policy interventions may be needed, especially if they take the form of perverse fluidity, with higher rates of downwards mobility or simply greater "stickiness", where people with a migration background have higher relative rates of remaining in lower-status positions. A deeper understanding of the processes involved is needed in order to suggest specific policy solutions. One might for example want to focus on the role of the educational system: if descendants of immigrants are disproportionately channelled into low-status streams in the educational system (perhaps because of their geographical concentration in deprived areas), then reforms will need to be targeted at equalising the playing field in education. On the other hand, if perverse fluidity occurs because of social exclusion by the advantaged social classes, strategies for increasing diversity and encouraging bridging social ties will be needed.

Finally, issues of discrimination suggest that policy interventions need to be focused on enforcement of existing legislation rather than radically new initiatives. Discrimination is against the law in all European and North American countries of destination, but the onus tends to be on the victims of discrimination to hold employers to account. External monitoring by equality commissions or similar public bodies to ensure fair employment is rare. One notable example of such monitoring is that in Northern Ireland, where an ambitious and successful monitoring and enforcement programme has been working for a number of years (Muttarak et al., 2013).

As a first step however, the priority must be to improve the availability of the data, so that the nature and scale of the problem can be identified. The ideal data set would be sufficiently large so as to furnish different kinds of information, and therefore insight. First, it would enable researchers to differentiate between the main ethnic minority

groups. Since there is now powerful survey-based and field experimental research showing that disadvantage and discrimination vary among ethnic groups, it is no longer sufficient to combine all natives with a migration background into a single undifferentiated category. This undifferentiated approach runs the serious risk of underestimating the level of disadvantage experienced by some particularly disfavoured groups.

Secondly, the ideal data set would also enable one to distinguish between the grandchildren and even great-grandchildren of migrants, and not simply their children. Convergence with the majority-group's occupational profile is not expected to occur within a single generation, but unfortunately present resources such as the EU-LFS ad hoc module only allows consideration of the experiences of the children of migrants. In other words, it provides only a partial view of the socio-economic outcomes of natives with a migration background – the grandchildren and later generations are invisible in the EU-LFS, and are merged with the natives without a migration background. It may possibly be the case that the grandchildren of migrants do experience equality of opportunity with the majority group, but there is no way of knowing at present whether this is the case or not. It will probably rarely be practicable in survey research to ascertain the countries of birth of all grandparents or great grandparents, and it is likely that other measures such as self-reported ancestry will be needed. (See for example the measure of ancestry that has been developed for the European Social Survey by Heath, Schneider and Butt, 2016.)

Social mobility is also a dynamic process that standard instruments do not capture especially well. The typical survey-based analysis of social mobility simply provides a snapshot of a single moment in time, whereas people's occupations may, to greater or lesser extents, vary across the life cycle. One potential worry is that natives with a migration background may find themselves disproportionately in sectors of the labour market that do not provide much in the way of career progression (as indeed do many women who have interrupted careers and who take up part-time work). Thirdly then, the ideal data set would provide information on occupational trajectories, which could be collected either prospectively through (expensive) panel studies or retrospectively in cross-section surveys.

Fourth and most importantly, this data set would furnish necessary information about the socio-economic origins of both those with and without a migration background. Retrospective measures of mothers' and fathers' social class at the time when the respondents themselves were growing up are reasonably reliable and are often implemented in cross-section surveys, although they are not routinely collected in major official surveys. Furthermore, there are particular challenges if one wishes to measure intergenerational income mobility. Information about parental income cannot reliably be collected retrospectively, and standard practice is to draw on long-term panel studies where the same respondents are followed up from childhood to adulthood. (Linked tax records of adults and their parents are practicable in some countries, but data on migration background will not typically be available.)

Panel studies of this kind are very expensive, and inevitably new panels will take many years to generate results about intergenerational mobility. Moreover, panel studies themselves suffer from important issues of attrition and thus potentially of bias. Cross-sectional studies investigating social class mobility are therefore likely to be the most practicable vehicles for this kind of research, without however overlooking the potential of the kind of register data available in the Nordic countries, and of linked

census data that are available in the United Kingdom with the Longitudinal Survey. The highly regarded European Social Survey provides a model of what can be done, but the sample size is unfortunately too small for the kind of analysis needed.

In conclusion, the existing evidence suggests clearly enough that some minority groups in some countries are particularly at risk of falling into the trap of entrenched disadvantage, but we know far too little about the mechanisms involved or even whether the problems persist into later generations. The lack of current good data obscures many problems. But 'absence of evidence' is not the same as 'evidence of absence'. If we do not collect the right sort of data, we may be lulled into a false sense of security and end up sleepwalking into problems of entrenched disadvantage.

Notes

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2. The "Other Europe" category includes EFTA countries (Switzerland, Iceland, Liechtenstein, Norway), candidate countries (Former Yugoslav Republic of Macedonia and Turkey), and Andorra, Albania, Bosnia Herzegovina, Belarus, Faroe Islands, Monaco, Republic of Moldova, Montenegro, Serbia, Russian Federation, San Marino, Ukraine, Vatican City and Kosovo* (*This designation is without prejudice to positions on status, and is in line with United Nations Security Council Resolution 1244/99 and the Advisory Opinion of the International Court of Justice on Kosovo's declaration of independence.).

3. Selectivity refers to the degree to which migrants deviate from the general population in their country of origin. The term positive selection is used if migrants are disproportionately recruited from the upper part of the distribution of motivation or skills, and negatively selected if they are disproportionately recruited from the lower part of the distribution in the origin country.

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Annex 6.A.

Annex Table 6.A.1. Over- and underrepresentation at different occupational levels of natives with at least one immigrant parent compared to natives with native parents, eleven European countries, by the parent's country of origin

Origin and destination countries	Unemployed/ low skilled	Skilled industrial	Intermediate	Salariat
Austria				
Other Europe	16	6	-5	-18
Belgium				
EU-15	5			-4
EU-13	18			-17
Other Europe	20	9		-25
North Africa/ Middle East	18			-21
Spain				
EU-15	15		-8	-7
North Africa/ Middle East	18	-8	-11	
Central/South America		-7		
France				
Other Europe				
North Africa/ Middle East		-4	-3	5
Other Africa		-10		
South/East Asia		-11		15
Greece				
EU-15			-15	
Other Europe	20		-12	-11
North Africa/ Middle East	21		-22	
Italy				
EU-15	4			
Other Europe	18		-12	
North Africa/ Middle East	12	-6		
Central/ South America	20		-12	
Luxembourg				
EU-15	4			
Norway				
South/East Asia	17	-9		
Portugal				
EU-15	16			
Other Africa	7	-12		
Sweden				
EU-13		-6		
Other Europe	7			

North America and Australia	14		
North Africa/ Middle East	16		
United Kingdom			
EU-15	-5		7
EU-13		-5	
North America and Australia			11
North Africa/ Middle East			11
Other Africa		-7	16
South/East Asia		-6	5
Central/South America	5	-3	

Note: Men and women combined, economically active respondents aged 15-59. Differences shown are statistically significant at p<0.05 and based on a cell size>=20.
Source: European Union Labour Force Surveys (EU-LFS) and its Ad-Hoc Module (AHM), 2014.

Annex Table 6.A.2. Over- and underrepresentation at different occupational levels of natives with at least one immigrant parent compared to natives with native parents, eleven European countries, by parent's country of origin and parental qualifications

	Unemployed/ low skilled		Skilled industrial		Intermediate		Salariat	
	Low	High	Low	High	Low	High	Low	High
Austria								
Other Europe	+14	+15	+9		-13		-11	-17
Belgium								
EU-15		+5						
EU-13		+25						-22
Other Europe	+14	+25					-18	
North Africa/ Middle East	+17		-7				-15	
Spain								
EU-15	+22	+11			-11		-11	-12
North Africa/ Middle East	+20	+21						
Central/South America	+13							
France								
Other Europe								
North Africa/ Middle East	+5			-6	-6			+8
Other Africa			-13	-7				
South/ East Asia								
Greece	38	39	9	5	36	20	18	36
EU-15								
Other Europe	+18	+24			-18			-21
North Africa/ Middle East								
Italy	28	21	17	6	31	28	24	46
EU-15								
Other Europe	12	+27		+6		-12		-21
North Africa/ Middle East		+18						-16
Central/South America	+18	+24						-15
Luxembourg	16	12	10	8	23	17	51	62
EU-15		+5						-6
Norway	16	14	18	13	25	18	41	56
South/East Asia		+22		-13				
Portugal	34	23	19	4	21	13	25	60
EU-15	+17	+22						-19
Other Africa	+17	+7	-11			+7		-12
Sweden	17	19	21	13	26	19	36	49
EU-13								
Other Europe	+13		-12					
North America and Australia		+16						
North Africa/ Middle East								
United Kingdom	25	20	12	7	27	22	37	52
EU-15	-6						+9	
EU-13							+13	
North America/ Australia					+15			

North Africa/ Middle East		
Other Africa	-10	+18
South and East Asia	-7	
Central/South America	-7	

Notes: Men and women combined, economically active respondents aged 15-59, split by parental qualifications (at most lower secondary; upper secondary and above). Differences shown are statistically significant at $p<0.05$ and based on a cell size>=20.
Source: European Union Labour Force Surveys (EU-LFS) and its Ad-Hoc Module (AHM), 2014.

Annex Table 6.A.3. Mean (standard deviation) of characteristics of children of migrants by country of residence

	AT	BE	ES	FI	FR	GR	IT	LU	NO	PT	SE	UK
age	35	34	25	31	36	38	30	33	34	30	34	34
	(14)	(13)	(11)	(15)	(13)	(13)	(12)	(13)	(13)	(12)	(13)	(14)
Highest qualifications												
Lower secondary	27	35	45	37	25	32	41	35	26	48	23	21
	(44)	(48)	(50)	(48)	(44)	(47)	(49)	(48)	(44)	(50)	(42)	(41)
Upper secondary	49	40	28	43	45	43	44	43	35	29	48	41
	(50)	(49)	(45)	(50)	(50)	(50)	(50)	(50)	(48)	(45)	(50)	(49)
Tertiary	24	25	27	20	30	25	16	22	39	23	29	38
	(43)	(43)	(45)	(40)	(46)	(43)	(37)	(42)	(49)	(42)	(46)	(49)
Dummy: both parents migrants	42	44	53	17	39	76	15	57	25	29	32	55
	(49)	(50)	(50)	(38)	(49)	(43)	(36)	(50)	(43)	(46)	(46)	(50)
Parental qualifications												
Lower secondary	27	50	37	27	54	39	41	35	19	48	19	50
	(45)	(50)	(48)	(45)	(50)	(49)	(49)	(48)	(39)	(50)	(39)	(50)
Upper secondary	46	27	24	36	24	39	44	42	33	23	37	22
	(50)	(44)	(43)	(48)	(43)	(49)	(50)	(49)	(47)	(42)	(48)	(41)
Tertiary	27	23	40	37	22	22	15	23	48	29	45	28
	(44)	(42)	(49)	(48)	(42)	(42)	(36)	(42)	(50)	(46)	(50)	(45)
Occupational status												
Inactive	25	38	63	36	29	34	51	35	25	40	22	35
	(44)	(49)	(48)	(48)	(45)	(48)	(50)	(48)	(43)	(49)	(41)	(48)
Unemployed	6	9	12	11	8	17	9	5	4	12	7	5
	(24)	(29)	(33)	(32)	(28)	(37)	(29)	(22)	(20)	(32)	(26)	(22)
Low-skilled work	15	8	8	11	12	8	7	7	12	11	10	9
	(36)	(27)	(27)	(32)	(33)	(27)	(26)	(26)	(32)	(31)	(29)	(29)
Skilled	12	10	2	7	8	5	5	7	8	5	9	4

Industrial	(32)	(30)	(15)	(25)	(27)	(22)	(21)	(26)	(27)	(22)	(29)	(20)
Intermediate	14	13	6	15	14	17	12	15	13	12	16	15
	(35)	(34)	(23)	(35)	(34)	(38)	(33)	(36)	(34)	(32)	(36)	(36)
Salariat	28	22	9	20	29	19	16	31	38	21	36	32
	(45)	(42)	(29)	(40)	(46)	(39)	(36)	(46)	(49)	(41)	(48)	(47)
Region of origin												
EU15	27	55	42	41	35	22	33	90	60	18	59	32
	(44)	(50)	(49)	(49)	(48)	(41)	(47)	(30)	(49)	(38)	(49)	(47)
EU13	29	5	2	5	3	12	9	2	4	0	8	6
	(45)	(21)	(14)	(22)	(16)	(33)	(29)	(13)	(19)	(5)	(27)	(23)
Other Europe	36	11	2	23	4	41	17	2	7	1	12	2
	(48)	(32)	(14)	(42)	(20)	(49)	(37)	(14)	(25)	(9)	(32)	(14)
North America and Australia	1	1	2	6	0	6	6	0	8	0	3	5
	(11)	(10)	(13)	(25)	(6)	(25)	(23)	(7)	(27)	(7)	(17)	(22)
North Africa and Middle East	4	18	16	10	45	16	15	0	3	0	8	3
	(19)	(38)	(36)	(30)	(50)	(36)	(36)	(6)	(18)	(5)	(26)	(17)
Other Africa	1	7	4	5	8	1	6	3	1	66	2	10
	(8)	(26)	(18)	(21)	(27)	(8)	(24)	(18)	(12)	(47)	(14)	(30)
South and East Asia	2	3	2	8	4	2	4	1	15	3	4	31
	(15)	(16)	(15)	(27)	(20)	(13)	(19)	(11)	(36)	(16)	(19)	(46)
Central and South America	1	1	31	3	1	1	11	1	2	12	5	11
	(9)	(9)	(46)	(17)	(10)	(8)	(31)	(9)	(14)	(32)	(21)	(31)
N	1 959	1 816	2 102	607	3 333	2 220	2 127	1 681	578	1 095	1 947	5 601

Source: European Union Labour Force Surveys (EU-LFS) and its Ad-Hoc Module (AHM), 2014.

Chapter 7. The United States and Canada: Intergenerational social mobility among immigrants and their native-born children

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This chapter reviews the academic literature on new immigrants' intergenerational educational and labour market integration in the United States and Canada, and presents new findings. It begins with a discussion of American and Canadian immigration history, and then addresses the intergenerational transmission of educational outcomes. Particular attention is paid to students from disadvantaged backgrounds, especially minority ethnic-group students. The discussion points to language deficiencies as a major drawback, and outlines possible reasons for the relatively slow integration of the Hispanic community into higher levels of education in the United States. The chapter then turns to labour market outcomes in both countries, examining participation rates and earnings gaps for adult immigrants, immigrants who arrived as children, the children of immigrants and, as a comparison group, children with two native-born parents.

Main findings

The following key observations are based on a review of the academic literature and data from the OECD's Programme for the International Assessment of Adult Competencies (PIAAC). For the purposes of this study, unless otherwise indicated, the entire population of permanent residents is divided into four mutually exclusive categories. "Immigrant" refers to individuals who permanently migrate to either the United States or Canada as adults (or as older youth). Regardless of their current age, "immigrant children", refers to persons who immigrated at a young age (the age threshold varies across studies, but commonly before age 11 or so) and "children of immigrants" refers to those native-born children who have at least one immigrant parent. A distinct group, normally used as a comparison, comprises the children of parents who are both native born, i.e., the "children of the native born" or "children of non-immigrants". Unless otherwise specified, all measurements of educational and labour market outcomes are made when these "children" are adults. That is, for example, a 60-year old who immigrated at age four is an *immigrant child*.

- The shift from traditional immigration source countries to a larger set of more global source countries that occurred beginning in the 1960s for both the United States and Canada has had implications for the native-born children of those immigrants. For example, children of this "new" immigration from Asia have a remarkably high university attendance rate that is relatively insensitive to traditional predictors of postsecondary attendance, such as parents' education, family income and high school marks.
- One important phenomenon of the more recent immigration in the United States is the high percentage of persons who emigrated from Mexico and to a lesser extent from Central America. In 2011, Mexican immigration accounted for almost 30% of the total immigrant stock in the United States. In contrast, immigration to Canada is more diversified.
- For the United States and even more so for Canada, the correlation between children's educational attainment and that of their parents is much weaker for immigrant parents than for native-born parents. The educational trajectory of children of immigrant parents is less determined by their parents' level of education.
- In the United States, there is a substantial increase in average educational attainment between immigrants from Mexico and their children, but from a very low base. The average educational attainment of the children of Mexican immigrants is around the end of high school, which is not very far from the education level associated with the compulsory schooling age.
- On average, in both the United States and Canada the educational attainment of the children of immigrants is equal to or exceeds that of same-aged children of native-born parents. Female children of immigrants in the United States have years of schooling comparable to that of female children of native-born parents, but for males in the United States and for both genders in Canada the children of immigrants accumulate on average between about one-half and three-quarters of a year of additional schooling.
- Most remarkable is that among all ethnic groups, with the exception of those whose parents arrived from Central or South America or the Caribbean, children

of immigrants have a higher probability of attending university than the children of the native born. Especially the ethnic groups most linked with postsecondary attendance (such as the children of Chinese immigrants) seem to enrol in postsecondary education even when they have relatively low marks in high school. Furthermore, postsecondary attendance is relatively insensitive to family income for the children of immigrants in many ethnic groups. Across groups, postsecondary access appears not so much the major issue as is postsecondary completion.

- Turning to earnings, in the United States the children of immigrants have earnings that are essentially indistinguishable from those of the children of natives, with or without controlling for observable characteristics.
- In Canada, the children of immigrants have appreciably higher earnings than the children of natives. This is mostly due to the higher educational attainment of immigrants' children and their location in highly urbanised areas with earning premiums.

Introduction

Immigrant recipient societies need be concerned about the success of the children of new arrivals. Of particular relevance are the accumulation of skills by those children that are useful in the labour market – especially education and domestic language skills – and the children's labour market outcomes as adults. This chapter documents aspects of the current understanding of these intergenerational processes among immigrants[1] and their children in the United States and Canada, with the focus on disadvantaged groups. Recent US-Canada comparisons of immigrant intergenerational integration are by Picot and Hou (2011a, b), and a survey covering a broader set of issues related to the children of immigrants is by Sweetman and van Ours (2015).

The United States and Canada took different paths with respect to immigration after the Second World War, and again in the 1960s. This has led not only to a much higher immigration rate, but also to a different demographic and educational composition for new immigrants. Additionally, as geography has it, Canada has only the United States as an immediate neighbour, whereas the United States shares a border with Mexico from which, starting in the 1960s, it has obtained a remarkably large immigrant flow. The educational outcomes of the children of immigrants in the United States and Canada are distinct, with those in Canada attaining on average more years of schooling and higher skills, as measured by test scores, by the time they are adults.

To establish a relevant context, the chapter begins with a discussion of American and Canadian immigration history, which is reflected in the outcomes of immigrants' offspring. It then turns to the substantial issues, addressing in turn the intergenerational transmission of educational, and labour market, outcomes.

American and Canadian immigration systems

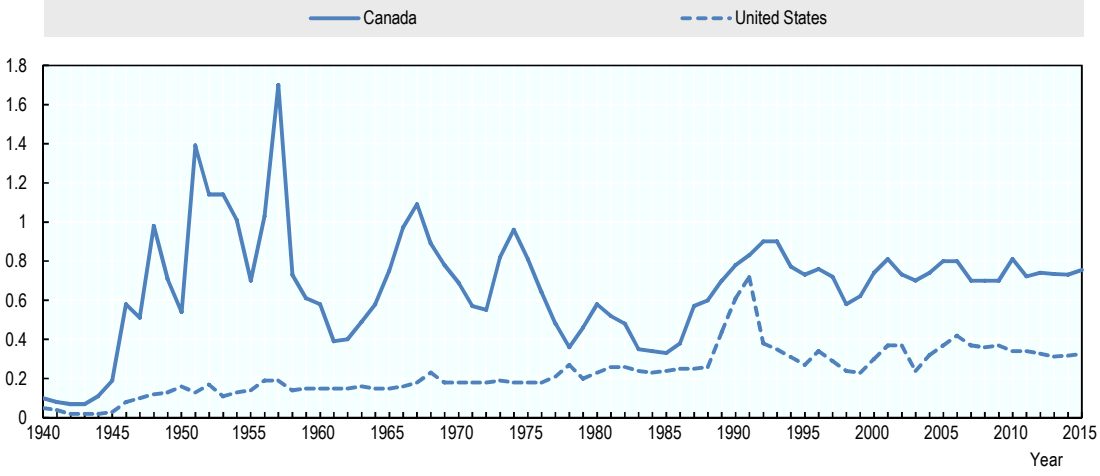
"Traditional" immigration, before the 1960s

Immigration is foundational in both the American and Canadian national stories (Smith and Edmonston, 1997 for the United States; Green and Green, 2004 for Canada). Each experienced the so-called Great Migration of the late 1800s and early 1900s, but both countries' immigration rates (i.e. immigration as a percentage of the population) were

much reduced during the First World War. Subsequently, immigration continued until the Great Depression (about 1930) but was then essentially curtailed until the end of the Second World War.

After the Second World War (circa 1947), the broad strokes of the two nations' immigration history diverge. Figure 7.1 illustrates how the immigration rates developed in Canada and the United States between 1940 and 2015. While Canada recorded high immigration rates after the war that were similar to those it experienced in the 1920s (although similar absolute numbers correspond to a lower rate given the intervening population growth), US immigration never returned to pre-Depression levels or rates. With one exception (discussed below), the US immigration rate increased very slowly from the late 1940s to the present. Borjas and Katz (2007) point out that in the 20th century the share of the US population that comprised immigrants peaked in 1910 at around 23% and then steadily declined to around 5% in 1970; at that point it started increasing again, reaching around 13% in the year 2000.

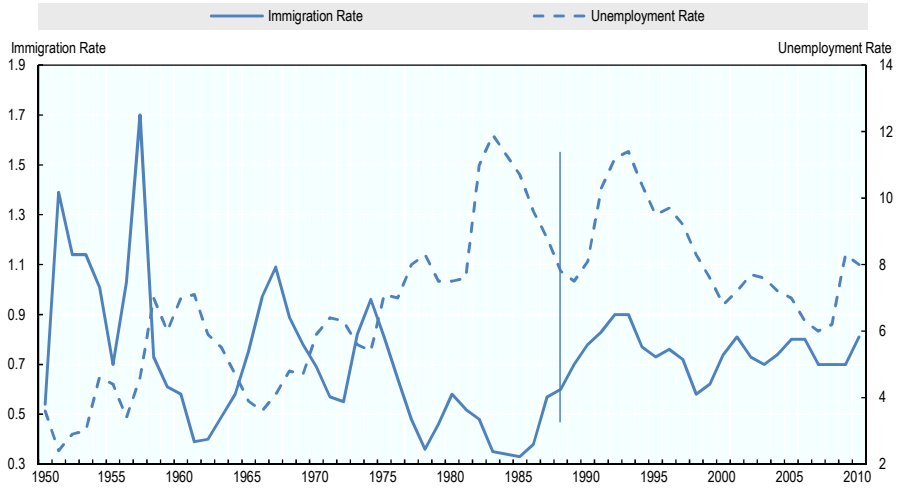
Figure 7.1. Immigration rate as a percentage of the population, United States and Canada, 1940-2015



Source: Canada: Immigration, Refugees and Citizenship Canada (IRCC, multiple years), Facts and Figures: United States: Department of Homeland Security (DHS, multiple years), *Yearbook of Immigration Statistics*.

Whereas post-war US immigration was very stable from year to year, Canada adopted a pro-cyclical immigration policy (Figure 7.2): increases during economic booms and marked decreases during recessions (with exceptions such as the mid-1950s Hungarian refugee flow). The country dropped this policy in the early 1990s.

Figure 7.2. Canadian unemployment and immigration rates (1950-2010)



Source: Canada – Immigration, Refugees and Citizenship Canada (multiple years), Facts and Figures; United States – Department of Homeland Security (multiple years), *Yearbook of Immigration Statistics*.

Importantly, the United States has had significant undocumented immigration flows since the 1960s, much of it from Mexico and to a lesser extent Central America. Baker and Rytina (2013) of the US Department of Homeland Security (DHS) estimate that as of 2012 there were about 11.4 million undocumented immigrants, up from 8.5 million in 2000. About 59% of this stock was born in Mexico, with at least an additional 14% from Central America. Although intrinsically hard to measure, Borjas (2017) suggests that as many as 30% of the total stock of US immigrants aged 20-65 in 2012/13 may be undocumented. There are no credible estimates of the undocumented population for Canada. However, a report from the Office of the Auditor General of Canada employing information from the country's Ministry of Immigration, Refugees and Citizenship (IRCC) identified about 63 000 individuals in the late 2000s, although this was probably an underestimate of the total. Therefore, in the United States the undocumented represent around 30% of all immigrants (legal and undocumented), whereas in Canada they represent (at the upper bound) about 5%. The major US regularisation of the late 1980s and early 1990s – following from the 1986 Immigration Reform and Control Act – provided amnesty and a path to citizenship (Borjas, 2007). Even during that massive spike in legal immigration, as seen in Figure 7.1 when many undocumented immigrants became regularised, the US rate stayed below the legal immigration rate in Canada.

Of course, the US population is roughly 10 times that of Canada so it is important to keep absolute numbers in mind. The number of legal immigrants arriving in Canada each year is one-third to one-quarter of the US count.

"New" immigration, since the 1960s

Both the United States and Canada dramatically changed their immigrant selection processes in the mid- to late-1960s. Previously, the source countries for both had been virtually restricted to Europe and their North American neighbours. However, this was recognised as discriminatory, and the United States shifted to a system favouring family reunification/sponsorship, while Canada adopted a system with greater emphasis on economic migration and introduced the first immigration points system in 1967,

increasing the range of source countries markedly. Both countries also managed major programmes offering citizenship to refugees.

Table 7.1 documents annual legal immigration by immigration class, averaging the years 1990 to 2015. Just over 60% of US immigrants were family members. In contrast, for Canada the family class averaged around 30%. Economic immigrants formed only about 13% of US immigration, with most sponsored by employers, whereas in Canada their share is just over 55% with, until recently, employers playing a much lesser role. This composition has implications with regard to immigrants' children, since economic class immigration comprises a higher share of intact nuclear families than does the family class. This implies that Canada receives more child migrants who spend their formative years in the recipient country, and also has more individuals with two immigrant parents. Refugees are an interesting comparison that illustrates the confusion that can arise in popular discussion when rankings by absolute numbers and percentages are intermixed without sufficient explanation. As seen in Table 7.1, refugees represent roughly 12% of the legal permanent migration flow in both countries, but on average the United States accepts just over 120 000 annually, compared to Canada at just under 30 000. Conversely, the same refugee arrivals are approximately 0.04% of the US population, but about 0.09% of that of Canada. Different stories can be told by selectively quoting these statistics.

Table 7.1. Annual immigration by immigration class to the United States and Canada, averaging years 1990 to 2015

	United States			Canada		
	% immigration flow	% population	Average annual count	% immigration flow	% population	Average annual count
Family	61.3	0.206	597 216	29.7	0.225	70 509
Economic	13.2	0.045	130 361	55.6	0.417	132 935
Refugee	12.1	0.042	122 399	12.4	0.094	29 403
Other	13.4	0.060	160 868	2.3	0.017	5 481
Total	100.0	0.354	1 010 843	100.0	0.754	238 351

Source: Canada – RCC, multiple years; United States – DHS, multiple years.
Note: Economic in Canada includes accompanying family members of economic migrants.

Table 7.2. Top ten source countries by resident stock, 1960/61 and 2011

United States			Canada		
	#	%		#	%
Panel 1: Immigrant Stock in 1960/1961					
Italy	1 256 999	12.91	United Kingdom	265 575	25.17
Germany	989 815	10.16	Italy	161 730	15.33
Canada	952 500	9.78	Germany	107 270	10.17
United Kingdom	833 055	8.55	Netherlands	88 810	8.42
Poland	747 750	7.68	Poland	57 820	5.48
Soviet Union	690 598	7.09	United States	45 050	4.27
Mexico	575 902	5.91	Hungary	33 215	3.15
Ireland	338 722	3.48	Ukraine	27 640	2.62
Austria	304 507	3.13	Greece	21 555	2.04
Hungary	245 252	2.52	China	17 545	1.66
Total (All countries)	9 738 091	71.22	Total (All countries)	1 054 930	78.32
Panel 2: Immigrant stock around 2011					
Mexico	11 630 617	29.62	India	547 890	8.09
China	2 108 857	5.37	China	545 535	8.05
The Philippines	1 779 807	4.53	United Kingdom	537 040	7.93
India	1 757 266	4.47	The Philippines	454 340	6.71
Viet Nam	1 197 673	3.05	United States	263 760	3.89
El Salvador	1 175 634	2.99	Italy	256 825	3.79
Korea	1 084 768	2.76	Hong Kong, China	205 425	3.03
Cuba	1 036 697	2.64	Viet Nam	165 125	2.44
Dominican Republic	833 411	2.12	Pakistan	156 865	2.32
Canada	816 442	2.08	Germany	152 345	2.25
Total (All countries)	39 268 670	59.64	Total (All countries)	6 775 765	48.48

Sources: Panel 1: 1960 US Census of Population, and 1961 Canadian Census of Population. Panel 2: 2011 Canadian National Household Survey and 2007-2011 American Community Survey, U.S. Census Bureau.

Immigration subsequent to the 1960s reforms is sometimes called the "new" immigration. For both countries immigrant source countries globalised, with greater numbers coming from Africa and especially Asia. Also and notably, the United States (but not Canada) saw a marked increase in immigration from Central America, and a dramatic increase from Mexico. Table 7.2 illustrates this shift. Panel 1 summarises the stock (i.e. the number of immigrants resident) and the distribution of immigrants by source country in 1960/61; panel 2 does the same around 2011. There is clearly an important shift in source countries. Increasing diversity, except for Mexican immigration in the United States, is also indicated by the declining share of immigrants represented by the top 10 countries as seen by comparing the 'total' rows.

Immigration history's implications for analyses across the immigrant generations

The children of immigrants are influenced by their parents' characteristics and outcomes, especially economic and labour market outcomes, by the cultural characteristics of the community in which they reside, and by characteristics of the surrounding society, especially those of the education system and labour market. Of particular relevance for both countries is a well-documented (and appreciable) decline in earnings at entry across successive cohorts of new immigrants that began following the onset of the new

migration. (See for example Borjas, 1985, 1995 and 2015 for the United States, and Baker and Benjamin, 1994; Aydemir and Skuterud, 2005; and Picot and Sweetman, 2005 and 2012 for Canada.)

Immigration from Mexico – as well as Hispanic immigration from Central and South America – is also an important issue in the United States (Haller, Portes and Lynch, 2011a, b; Alba, Kasinitz and Waters, 2011). Borjas (2007, p. 1) points to the "heated [US] debate over the possibility that Mexican immigrants and their descendants may assimilate slowly – relative to the experience of other immigrant waves and this slow assimilation may lead to the creation of a new underclass." Compounding this is the large share of Mexican immigrants who are undocumented, and therefore frequently do not have full access to social and health services even though children of undocumented immigrants born in the United States are citizens themselves. For Canada, no one source country similarly dominates.

Table 7.3 presents the geographic origins of the stocks of both immigrants and the children of immigrants around the year 2000. Despite the "children" label, all of those represented in this table are adults. Also, although some of the younger individuals in the "children of immigrants" category may be young enough to be the children of the older individuals in the "immigrant" category, there is no parent-child relationship between these columns. While neither column exclusively comprises traditional or new source countries (roughly pre- or post-1970), for both the United States and Canada the children of immigrants have parents who were drawn more heavily from the so-called traditional source countries of, primarily, north-western, eastern and southern Europe, and the English-speaking developed world whereas the immigrant column reflects the new immigration to a greater degree. For example, while Asia comprises 20% to 30% of newer immigrants, only between 2% and 5% of the children of immigrants originate from this region.

Table 7.3. Geographic origins of immigrants and the parents of native-born children of immigrants around 2000

	Immigrants (%)	Parental origins of native-born children of immigrants	
		Father (%)	Mother (%)
Panel 1: United States			
US	--	31.1	30.0
Mexico	27.5	14.4	13.5
English-speaking developed world excl. UK	2.4	5.3	6.9
Eastern Europe	4.7	8.0	6.2
North-western Europe	5.3	12.1	15.9
Southern Europe	2.6	9.9	7.3
South America	6.4	1.6	1.7
Central America & Cuba	9.8	3.3	3.5
Caribbean	7.1	1.9	1.9
Asia	20.5	4.6	5.0
Middle East	2.0	1.0	0.7
Africa	2.6	0.5	0.4
Oceania & Japan	6.3	3.0	4.0
Other	2.8	3.1	3.0
Panel 2: Canada			
Canada	--	21.8	30.5
Mexico	0.7	0.3	0.3
English-speaking developed world excl. UK	4.5	6.6	6.6
Eastern Europe	10.2	15.7	11.5
North-western Europe	18.9	34.8	32.5
Southern Europe	10.3	14.1	12.4
South America	4.1	0.5	0.5
Central America & Cuba	1.7	0.2	0.2
Caribbean	5.7	1.2	1.0
Asia	29.7	3.1	2.9
Middle East	3.2	0.6	0.5
Africa	5.5	0.7	0.5
Oceania & Japan	5.6	0.6	0.6
Other	0.2	0.1	0.8

Source: Aydemir and Sweetman (2008), Table 3. Data: US 1998-2004 CPS; Canada 2001 Census.

Table 7.4 presents shares of adult and child immigrants, the children of immigrants, and the children of the native born, in Canada and the United States around 2000 and 2012. Perhaps surprisingly, the immigrant share of the population in Canada is only slightly over 50% higher than that in the United States, whereas Figure 7.1 and Table 7.1 suggest a larger difference. Two major factors explaining (part of) this are, first, the larger number of undocumented immigrants living in the United States who are captured in surveys of the domestic population; and second, emigration from Canada, which is considerable (see e.g. Aydemir and Robinson, 2008). While most immigrants arrive in the United States when they are older than 11 or 12, a higher share arrives at young ages in Canada. In contrast to the modest difference in immigrant population shares, the

population share of the children of immigrants is almost 2.4 times larger in Canada. This is more in line with expectations and also reflects the earlier historical period, the decades following World War II, when the gap in immigration as a proportion of each country's population was larger. As expected given the above-mentioned differences in family/economic class flows, the percentage of native-born children with two immigrant parents is markedly higher in Canada.

In the datasets employed for most contemporary analyses, virtually all of the descendants of the Great Migration (i.e. migration in the late 1800s and early 1900s) and earlier are primarily of European ancestry and are in the comparison group labelled children of the native born. Further, studies of the children of immigrants using older data focus primarily on individuals whose parents immigrated prior to the immigration reforms of the 1960s, whereas such studies using more recent data capture a higher share of members of the "new" immigration whose parents immigrated after the 1960s reforms. It is clear that findings for immigrants or their children based on immigration prior to the 1960s are not necessarily transferable to subsequent cohorts, as evidenced by the decline in labour market outcomes of new immigrants starting in the 1970s. Differences between the children of the old and new migration may exist as a result of changing ethnicity, parents' labour market success, and other similar factors.

Since in much empirical research the grandchildren from of the Great Migration and earlier arrivals form the comparison group in analyses of earnings and other outcome variables, it is important to understand that the compositions of these population subgroups in the United States and Canada are very different, as seen in Table 7.3. The share of the children of the native born that is a visible minority is much higher in the United States. In large part this reflects the large African-American US minority (the Hispanic community is normally classified as non-visible minority). In Canada, the largest visible minority group among those with the native born parents comprises Indigenous peoples. Both these populations have faced discriminatory educational and labour market constraints. Some research uses the entire group of children of the native born as the comparison group, whereas other work focuses on the non-visible minority subset. That these two approaches yield different empirical results is not surprising; those reading the literature, therefore, need consider how the data for analysis are selected when interpreting results.

One crucial measurement issue in studying intergenerational issues related to immigration is the complexity associated with measuring later generational membership. Duncan and Trejo (2014, 2017) point out that ethnic identification becomes increasingly problematic for the children, grandchildren and subsequent generations of immigrants given the complexities of intermarriage and self-identification. Moreover, the authors estimate that the rate of ethnic "stickiness" varies systematically across ethnic groups, with Hispanic immigrants more likely to intermarry and cease reporting Hispanic ethnicity than other immigrant ethnic groups. In particular, high-income/high-education individuals from some of the largest Hispanic source countries are more likely to intermarry, and – by the time their family's immigration experience dates back to their grandparents – are less likely to self-identify as Hispanic than immigrants from other groups. This biases estimates of intergenerational integration and makes Hispanic, and especially Mexican, immigrants appear to integrate more slowly. This is not to say that results are overturned, but the gaps observed in studies using self-reports of ethnicity as a basis for identification may be too pessimistic regarding Hispanic integration.

Table 7.4. Generational population shares of immigrants in the United States and Canada, 2000 and 2012, percentages

	Immigrants and immigrating children			Children of immigrants				Children of two native born parents			
	Total	Adult Immigrants	Child Immigrants	Total	Father only	Mother only	Both parents	Total	Children of a native born, non-visible minority	Children of a native born, visible minority	Total
2000											
United States	14.6	12.8	1.9	6.0	1.8	1.9	2.3	79.4	63.7	15.7	100
Canada	22.6	19.1	3.4	14.3	4.4	3.1	6.8	63.1	60.1	3.0	100
2012											
United States	14.4	12.8	1.6	8.0	2.8	2.1	3.1	77.6	-	-	100
Canada	25.8	21.9	4.0	14.9	4.5	3.6	6.8	59.3	-	-	100

Note: Adult immigrants are defined as arriving aged 12 or older in 2000, and 11 and older in 2012, and child immigrants are those arriving younger than those ages.
Sources: 2000: Aydemir and Sweetman (2008), Tables 1 and 2. US Bureau of Labor Statistics, *Current Population Survey microdata*, 1998-2004; Statistics Canada, *Canada 2001 Census microdata*. Ages 25-65.
2012**:** PIAAC 2012; public use microdata. Ages 25-65.

Educational and labour market outcomes of the children of immigrants

Overviews related to the children of immigrants in the United States and Canada are by Aydemir and Sweetman (2008), Picot and Hou (2011a, b) and Sweetman and van Ours (2015). Card, DiNardo, and Estes (2000) provide a thorough analysis of the US context from the 1940s to the 1990s while Chiswick and DebBurman (2004), using data from 1995, find that the children of immigrants in the United States have higher levels of education than both the foreign-born and the children of the native born. Feliciano and Lanuza (2017) survey and interpret the US literature on immigrant intergenerational educational attainment.

A demographic overview of the children of immigrants in the United States is provided by Taylor et al. (2013) using data from 2002. They show that the children of immigrants, of whom 36% have graduated from college, are 5% more likely to have done so than the average American (without controlling for age; the children of immigrants are about eight years younger on average). Household income is almost exactly the national average as is homeownership, but the poverty level of immigrants' offspring is slightly below the national average. Ethnically, in 2002 the children of immigrants looked very different from the children of the native born: the composition of the children of immigrants was 46% white, 4% black, 35% Hispanic, 12% Asian, and a small "Other" grouping. For the children of non-immigrants in contrast, the composition was 78% white, 13% black, 6% Hispanic, and < 0.5% Asian. For Canada, basic descriptive statistics are provided by Aydemir and Sweetman (2008) and Picot and Hou (2011a) using data from 2000. The children of immigrants, just over 23% of whom have graduated from university, are about 6.5% more likely to have done so than the average child with native born parents (without controlling for age; this group is about the same age). Annual earnings are very similar to or slightly higher than the national average.

Educational attainment

There are noticeable differences between the United States and Canada in the educational outcomes of the children of immigrants that mirror the differences of the immigrants' outcomes. Table 7.5 explores these using the OECD Programme for the International Assessment of Adult Competencies (PIAAC) data, which are recent and employ a consistent sampling frame across countries. The table presents regression results estimating years of schooling and controlling only for age. The sample size for Canada is appreciably larger, providing more precise estimates. The intercept (i.e. constant) reflects the average years of schooling of the children of the native born, including visible minorities, at age 40. Each generational coefficient represents a difference relative to that group.

Table 7.5. Estimated years of schooling for adult and child immigrants, the children of immigrants and the children of the native born, United States and Canada, 2012

	United States		Canada	
	Male	Female	Male	Female
Immigrants	-0.812*	-1.196***	1.193***	0.368***
	(0.320)	(0.297)	(0.142)	(0.111)
Immigrating children	-0.715	-0.459	0.953***	0.933***
	(1.088)	(0.450)	(0.229)	(0.227)
Children of immigrants	0.793**	-0.095	0.576***	0.470***
	(0.270)	(0.256)	(0.123)	(0.126)
Constant (Children of the native born)	13.43***	13.79***	13.33***	13.73***
	(0.086)	(0.069)	(0.067)	(0.054)
N	1838	2221	10003	11796
R2	0.017	0.025	0.044	0.057

Notes: Individuals aged 25-69 with valid information on education, age at immigration, and parental and own place of birth. Controls are (age – 40) and (age – 40)^2. Immigrants that arrived before the age of 12 are regarded as immigrating children. Heteroskedasticity consistent standard errors are in parentheses: * p<0.05, ** p<0.01, *** p<0.001. The constant is interpreted as the average years of schooling of a 40-year-old child of the native born, and other coefficients are differences from that average holding age constant. For example, a 40-year-old male immigrant in the United States is estimated to have 0.8 years less schooling than a 40-year-old man with no immigrant background.
Source: PIAAC, 2012. Authors' calculations.

Focusing first on the children of the native born, females have slightly more schooling than males on average, but for each gender the United States and Canada are effectively identical. Large differences in the average level of education for immigrants are evident however, with those in the United States having substantially fewer years of schooling than the children of the native born in accord with US immigrant selection processes. In contrast, in accord with Canada's immigration selection processes, immigrants have higher years of schooling than the children of the native born. This has appreciable ramifications for both young immigrants and the children of immigrants. Holding intergenerational correlations constant, Aydemir and Sweetman (2008, Table 10) project future national educational levels given the immigrants' education levels and their share of the population. They predict marked increases for Canada, and few changes from the current norms for the United States.

Although the standard errors are large, making inference difficult for the United States, there is no evidence that immigrating children are faring particularly well there. In contrast, in Canada the coefficient estimates for both genders are positive, statistically significant, and economically large. This is a dramatic difference that mirrors the difference for adult immigrants, but unlike the results for adult immigrants, the difference with immigrating children results from events and choices made within the host country. It reflects both the receptivity of the domestic education systems to these immigrants, and the aspirations of the immigrant parents and children. (See Raleigh and Kao, 2010 for more on parental aspirations across immigrant ethnic groups in the United States.)

On a positive note, results for the native born children of immigrants show them to be obtaining at least as many years of schooling, and sometimes appreciably more, than the children of the native born comparison group. In the United States, males obtain more years of schooling while females are indistinguishable from them, and for Canada both estimates are positive and statistically significant. The finding that male children of

immigrants have a higher level of education than the children of the native born in the United States differs from that observed in some studies. For example, Picot and Hou (2011a) report the US children of immigrants as having average years of schooling comparable to that of the children of the native born. However, many of the studies they surveyed used the sub-group of non-visible minorities among the children of the native born as the reference group, who (as discussed) on average have better outcomes, whereas the sample in Table 7.5 includes the entire population of the children of the native born since ethnicity is not available in the data employed. This discrepancy may explain the difference. Also, the data underlying Table 7.5 are more recent and have a greater percentage of children of the "new immigration".

Table 7.6 expands the ideas of Table 7.5 but splits the sample into three parts, based on each respondent's parents' level of education. These are defined using the parent with the highest level of education as: low, i.e. below high school or equivalent; medium, i.e. some or complete upper secondary and post-secondary non-tertiary education; and high, i.e. some or complete tertiary education. In all cases, on average more highly educated parents have more highly educated children. Using the children of the native born as a base case, those of highly educated parents have comparable years of schooling in Canada and the United States, but the children of native born parents with low levels of schooling have appreciably more years of education in Canada.

Focusing on the children of immigrants in Table 7.6, there are marked differences across both genders and countries. For males in the United States, children of highly educated immigrant parents outperform the children of the native born with parents in the same education category in terms of years of schooling. In contrast, there is effectively no difference for this group in Canada. At the other end of the spectrum, male children of immigrants whose parents have low levels of education attain more years of schooling relative to the children of the native born with the same level of education in Canada than in the United States. Women have very different patterns. In the United States there is effectively no difference between the children of immigrants and those of the native born, whereas the Canadian women somewhat reflect the case of the US men. Across the entire table, the intergenerational transmission of education seems weaker in Canada than the United States, and it is especially weak for immigrant children and the native born children of immigrants in Canada. For the children of immigrants in Canada, parents' education matters far less in determining the final education level of their children than it does for the children of the native born, in that the children of immigrant parents with low levels of education do extremely well in the education system. As will be seen, this seems to result from actions taken on both the supply side (i.e. the school) and the demand side (i.e. immigrant parents and their children) of the equilibrium.

Beyond years of schooling, basic skills as measured by tests scores are a complementary educational outcome to years of schooling. To that end, regressions with literacy scores from the PIAAC as the dependent are presented in Table 7.7. Though not presented, regressions using numeracy scores have a pattern of results that is broadly similar. The regression specifications in Table 7.7 are similar to those in Table 7.5, except that the number of regressions is twice as large since versions controlling and not controlling for educational attainment are both presented. In all of the regressions the test scores are normalised to have mean zero and variance one, where the mean is the average of the two countries with each given equal weight. The coefficients on the intercepts, therefore, are interpreted as measuring standard deviations from the two-country mean for the children of the native born whose highest level of education is high school, and the coefficients on the regressors measure differences (in standard deviations) from that group.

Table 7.6. Intergenerational transmission of years of schooling by gender, United States and Canada, 2012

	United States						Canada					
	Male			Female			Male			Female		
	Highest Educational Attainment of Parents			Highest Educational Attainment of Parents			Highest Educational Attainment of Parents			Highest Educational Attainment of Parents		
	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Immigrants	-0.911*	0.210	1.144*	-1.540***	0.081	0.831*	0.735*	1.223***	1.368***	-0.671*	0.427*	0.955***
	(0.455)	(0.582)	(0.547)	(0.339)	(0.654)	(0.393)	(0.291)	(0.204)	(0.177)	(0.291)	(0.205)	(0.161)
Immigrating children	-0.709	0.315	0.377	0.919	-0.236	0.422	1.728**	0.452	0.581	1.488**	0.271	0.831*
	(0.876)	(0.723)	(1.695)	(0.573)	(0.704)	(1.030)	(0.590)	(0.362)	(0.347)	(0.507)	(0.329)	(0.339)
Children of immigrants	0.107	1.296***	0.860*	0.671	-0.216	-0.027	0.915***	0.702**	0.073	0.387	0.259	0.439*
	(0.555)	(0.376)	(0.372)	(0.427)	(0.419)	(0.443)	(0.238)	(0.224)	(0.181)	(0.205)	(0.148)	(0.222)
Constant (Children of the native born)	11.66***	12.94***	14.58***	11.71***	13.39***	14.80***	12.25***	13.07***	14.39***	12.70***	13.59***	14.69***
	(0.250)	(0.111)	(0.180)	(0.230)	(0.120)	(0.156)	(0.149)	(0.095)	(0.106)	(0.117)	(0.091)	(0.101)
N	309	848	663	463	971	774	3420	3429	2828	4131	3931	3432
R2	0.033	0.044	0.036	0.097	0.002	0.011	0.033	0.052	0.070	0.039	0.016	0.040

Notes: See Table 7.5. Each constant is interpreted as the average years of schooling of a 40-year-old child of a native born parent in the relevant educational category, and the other coefficients in the same column are differences from that average for those whose parents are in the same educational category. For example, a 40-year-old male immigrant in the United States whose parents attained only low education is expected to have 0.9 years less of schooling than a 40-year-old man without an immigration background whose parents also obtained only low education.
Source: PIAAC, 2012. Authors' calculations.

Table 7.7. Proficiency in the PIAAC measure of literacy by immigrant generation by gender, United States and Canada, 2012

	United States				Canada			
	Male		Female		Male		Female	
Immigrants	-0.890***	-0.777***	-0.872***	-0.676***	-0.475***	-0.697***	-0.703***	-0.786***
	(0.101)	(0.089)	(0.094)	(0.075)	(0.053)	(0.048)	(0.043)	(0.040)
Immigrating children	-0.491	-0.309	-0.453**	-0.394**	-0.074	-0.234*	0.103	-0.053
	(0.349)	(0.248)	(0.150)	(0.148)	(0.109)	(0.104)	(0.094)	(0.087)
Children of immigrants	0.042	-0.017	-0.207*	-0.192*	0.160***	0.067	0.126*	0.050
	(0.109)	(0.081)	(0.092)	(0.083)	(0.042)	(0.038)	(0.049)	(0.044)
Education								
- Below high school		-0.771***		-0.840***		-0.934***		-0.932***
		(0.078)		(0.065)		(0.053)		(0.062)
- At least bachelor's degree		0.868***		0.776***		0.720***		0.620***
		(0.062)		(0.045)		(0.035)		(0.030)
Constant **(Children of the native born)**	0.148***	-0.038	0.149***	-0.059	0.232***	0.170***	0.251***	0.145***
	(0.035)	(0.034)	(0.030)	(0.038)	(0.030)	(0.029)	(0.025)	(0.026)
N	1838	1838	2221	2221	10009	10009	11806	11806
R2	0.100	0.351	0.100	0.342	0.073	0.302	0.143	0.337

Notes: See Table 7.5. The omitted educational group are high school graduates.
Source: PIAAC, 2012. Authors' calculations.

Oddly, while Table 7.5 shows male children of immigrants in the United States to have about three-quarters of a year of additional education compared to the children of the native born, no such increment in literacy test scores is observable in the first column of Table 7.7. Continuing to focus on the first regression of each set, which does not control for years of schooling, for female children of immigrants in the United States, there is no gap in years of education, and there is a marginal statistically significant negative gap in test scores. In contrast, both male and female children of immigrants in Canada are ahead, in terms of both years of education and test scores. For numeracy (not shown) the pattern is the same for males, but neither coefficient for females is statistically significant. Overall, it is unclear why the years of schooling for the children of immigrants in the United States are not translating into skills, as measured by these assessments, at the same rate as for the children of the native born.

When controls for education are introduced into the regressions in the second column for each country/gender, the coefficients for the children of immigrants in the US sample are not much affected, whereas those for the Canadian sample are reduced and become statistically insignificantly different from zero. That is to say, the children of immigrants in the United States appear to obtain a somewhat lower test score increment compared to education than do the children of the native born, whereas in Canada the additional education accrued by the children of immigrants appears to "explain" their higher average test scores. Despite this observation with respect to the children of immigrants, test scores overall are clearly correlated with years of schooling, as evidenced by the coefficients on the education variables.

Educational outcomes and observed characteristics

Observed characteristics are associated with differences in educational outcomes between immigrating children, the children of immigrants, and the children of the native born. Before turning to a detailed discussion of various findings, a brief overview is provided regarding three clusters of variables: parents' education and income, ethnicity, and urbanisation. Parents' education and income are found to be less important in determining educational outcomes for the children of immigrants than is the case among the children of the native born; this is particularly the case in Canada. Moreover, parental income is much less important than education. Ethnicity (sometimes proxied by source country), likely involving cultural factors operating at the community level, appears to play a very important role in determining educational attainment. Average levels of such attainment vary dramatically across ethnic groups, and this is particularly evident for the new immigration. Additionally, compared to the children of the native born, the children of immigrants are not only much more urbanised but also more likely to live in the very largest urban centres. Education levels also tend to be higher in more highly urbanised regions. Educational gaps between the children of immigrants and the children of the native born can, therefore, look very different if the comparison group comprises the entire population of the children of the native born, as opposed to only those residing in the same local labour market.

An older line of research addressing the intergenerational integration of immigrants predating the new migration focuses not on individuals but on aggregate ethnic/source country outcomes. Both Borjas (1994, for the United States) and Dicks and Sweetman (1999, for Canada) find important ethnic group effects that persist from one generation to the next with convergence taking on the order of four generations.

Research using microdata also finds strong ethnic/source country effects on outcomes for the children of immigrants. In particular, in the United States there is substantial literature addressing Hispanic, especially Mexican, immigration. Landale, McHale, and Booth (2010) and Fortuny and Chaudry (2011) document that in 2007-08, 43% of the children of immigrants in the United States were Hispanic, and that the percentage is increasing. A very old story is of Hispanic immigrants having low education, and of their children having similarly low education. However, research at least as long ago as Smith (2003), focusing on the broad Hispanic/Latino community, shows that though starting from a very low base, educational integration is faster than had been appreciated. Slightly less optimistically, Trejo (2003), focusing on the somewhat narrower category of Mexican immigrants, finds marked improvements in educational attainment between the immigrants and their children, but the process slows down appreciably after that. What Trejo observes between the immigrants and their children is a very substantial increase to an average that is near high school graduation and not too far from what might be expected given compulsory schooling ages. This highlights that a key challenge facing the children and subsequent generations of Mexican immigrants is postsecondary education (Park and Myers, 2010; Grogger and Trejo, 2002).

Fry (2002) observes that it is not so much access as completion that is at issue. Hispanic high school graduates in the 1990s enrolled in postsecondary education at rates comparable to those of other ethnic groups, but were more likely to enrol part-time, and in community colleges as opposed to four-year institutions. Many failed to complete their degrees. Also, the enrolment rate in graduate and professional education is markedly lower than that for other ethnic groups in the United States. Policies focusing on postsecondary persistence and completion are important results from Fry's work. However, he notes, as do Duncan and Trejo (2014), that there are important differences within the Hispanic community. Especially, immigrants of Cuban origin have higher, and youth of Mexican and Puerto Rican origin have substantially lower, postsecondary completion rates than the Hispanic average.

Lopez (2009) directly surveys relevant Hispanic youth and finds that while 90% recognise postsecondary education as an important pathway to success, only about 48% plan on attending. The main reported impediment is financial pressure to support their family. Additional reasons included poor English skills, a dislike of school, and aspirations for employment in occupations that do not require postsecondary education. A disaggregation of these youths into immigrant children and the children of immigrants shows that the latter group is more likely to both plan to and actually attend postsecondary education. Also importantly, Perreira and Spees (2015) point out the substantial difficulties in attending postsecondary education among the large proportion of the postsecondary-aged Hispanic community who are undocumented. Plausibly, this has repercussions on ethnic-group-level social capital and aspirations that spill over to all youth in the community.

In terms of parental aspirations, Dondero and Humphries (2016) compare the college savings rates of Asian, Hispanic and white parents for their children in grade 10. They observed that Asian immigrants are more likely to save for their children's education, and have greater savings, than native born parents (irrespective of ethnicity). In contrast, Hispanic immigrants are less likely to save than native born parents, but looking only at those who do save, they have roughly the same amount put aside.

Fry (2007) points out the challenges facing those learning English as a second language in the school system, and notes that fully 70% of this group is Hispanic, with many

comprising the children of immigrants. He points out the relatively low scores of Hispanics and notes their particularly large language deficiencies. Akresh and Akresh (2011) pursue this issue further by using randomisation in the assignment of the language for achievement tests (either English or Spanish). They note that foreign-born children who arrive at an older age score higher when the test is offered in Spanish; those who arrive younger are, on average, indifferent to the language of the test; and the children of immigrants fare better when the test is offered in English. This suggests that integration towards English is occurring.

One reason sometimes put forward for the relatively slow integration of the Hispanic community into higher levels of education in the United States is the size of the community. In a sufficiently large community, English language acquisition is less important. As pointed out by Lazear (2007), shortly after arrival 80% of non-Mexican immigrants are fluent in English, in contrast to only 49% of Mexican immigrants. Moreover, time in the United States does not appreciably change this percentage and the share of Mexican immigrants who are fluent in English, which hits its maximum around 20 years after migration, is 60%. Lazear also documents larger-than-average enclaves among Mexican immigrants, and some argue that return migration because of the proximity of Mexico also plays an important role.

Borjas (2015) pushes Lazear's argument further. Although focusing on immigrants and not their children, he finds evidence suggesting that the rate of English language acquisition in the United States is significantly slower for larger non-English speaking groups. In particular, the substantial size of Hispanic enclaves reduces the incentive for resident populations to learn English, which reduces their long-term economic success. Related to this, Potochnick (2014) studies grade 10 math and reading test scores for the children of immigrants across three categories of US states: established immigrant recipient states, new immigrant recipient states, and those in between. She notes that immigrants have superior outcomes in the new immigrant recipient states where there are no well-established enclaves.

A substantial literature addresses approaches to improving educational outcomes among students from disadvantaged backgrounds, especially minority ethnic group students, in the United States (see e.g. Betts, 2011). The findings within this literature are mixed, and some studies have weak research designs. One recent contribution with a stronger design is by Card and Giuliano (2016), who study within-school streaming of high-ability students in grade 5. They find marked improvements in test score outcomes for gifted and high-achieving minority students who are clustered together in high-ability classrooms, with no evidence of negative spillovers on nonparticipants. Overall, the benefits appear to be concentrated among black and Hispanic high-ability and gifted children.

While streaming high ability students may be beneficial, there is also evidence of problems from streaming into low ability classes too early for the children of immigrants where the parents are foreign language speakers, especially if it is difficult to subsequently change streams. Worswick (2009) points out that in the Canadian context, the children of immigrants have low performance in vocabulary at age 6, but then accelerate and by age 14 have outcomes comparable to the children of Canadian-born parents. There is some evidence that if these children are streamed too young, they will not have had sufficient opportunities to catch up, meaning that the streaming decision is partly driven by the language spoken at home. (See Sweetman and van Ours (2015) for a discussion of these issues.) More broadly, many perceive that one of the advantages of the Canadian education system for immigrating children and the children of immigrants is

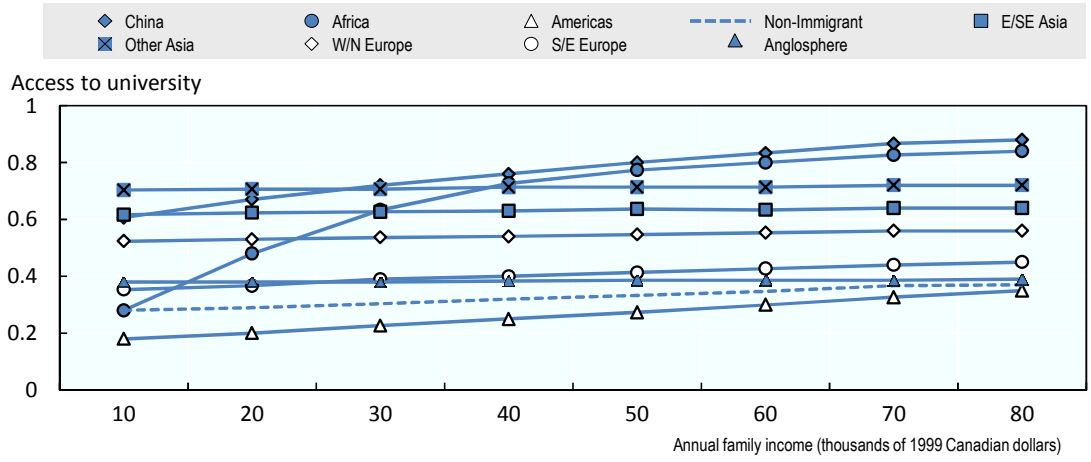
that it provides numerous opportunities to "bounce back" (Finnie, Laporte and Sweetman, 2010). This may account for some of the positive outcomes for the children of immigrants seen in Table 7.5 through Table 7.7.

In Canada substantial heterogeneity in educational attainment is observed across ethnic groups, but the ethnic distribution is very different from that in the United States and immigrant parents have much higher levels of postsecondary attendance. Using longitudinal survey data whose starting point was an early Programme for International Student Assessment (PISA), Childs, Finnie, and Mueller (2017) observe that university participation rates by age 21 for immigrating children, the children of immigrants and the children of the native born are, respectively, 57%, 54% and 38%. This sample of the children of immigrants are those of the "new" immigration to Canada discussed by Finnie and Mueller (2010).

Figure 7.3 through Figure 7.6 reproduce results from Childs, Finnie, and Mueller (2017) for Canada. The figures represent predictions from a model holding observable characteristics constant. Each displays the probability of university access by source region for the children of immigrants, and for comparison the children of the native born (labelled as the children of non-immigrants). The key difference in each of the plots is the x-axis, which in turn depicts family income; years of schooling for the parent with the most education; average high school grades; and PISA reading score. As will be seen, many of these traditional correlates of postsecondary access do not carry over to many immigrant source country groups – though some, especially the so-called "Anglosphere" (e.g. United States, United Kingdom, Australia, etc.) are similar to the non-immigrant group. Note that the United States is included in the "Anglosphere" as opposed to "the Americas", with the latter including Mexico, Central and South America and the Caribbean.

Figure 7.3 suggests that, on average, postsecondary attendance is relatively insensitive to family income for the children of immigrants in many ethnic groups, and where there is a very strong relationship, for parents from Africa and China, the mean level of attendance is quite high for the lowest income category. Most remarkable is that among every ethnic group, with the exception of those whose parents were from "the Americas", children of immigrants have a higher probability of attending university than the children of the native born (i.e., children of non-immigrants).

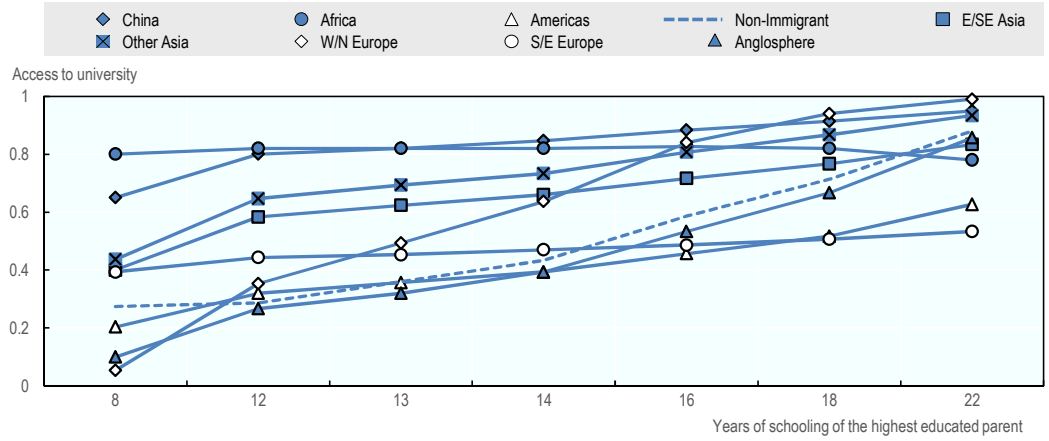
Figure 7.3. Children of immigrants' probability of university access by parental source region and family income



Note: Predictions from a regression model.
Source: Data from Childs, Finnie and Mueller, 2017.

A similar exercise is presented in Figure 7.4, which shows parents' years of schooling. A general upward trend is observed for most but not all ethnic groups, but it is not nearly as strong for those ethnic groups with high access rates as it is for the children of the native born.

Figure 7.4. Children of immigrants' probability of university access by parental source region and years of schooling

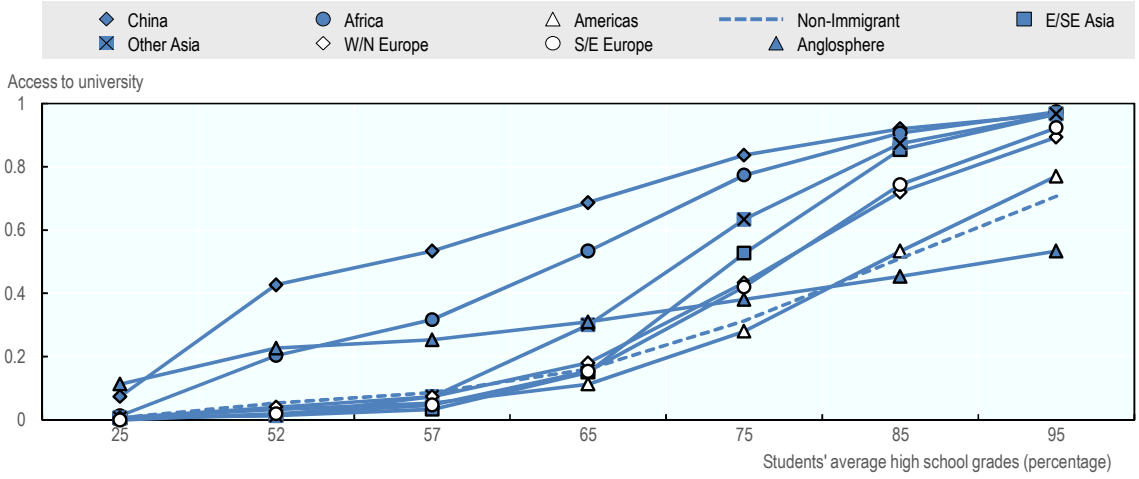


Note: Predictions from a regression model.
Source: Data from Childs, Finnie and Mueller, 2017.

Figure 7.5 turns to an intermediate outcome: the final average high school grade. The key insight here is that ethnic groups most linked with postsecondary attendance seem to gain access even when they have relatively low marks. There is a gap in university attendance between the children of the native born and the children of immigrants for most (but not

all) ethnic groups among those with high grade point averages, but the gap is substantially larger in the middle or bottom of the distribution.

Figure 7.5. Children of immigrants' probability of university access by parental source region and students' high school grades

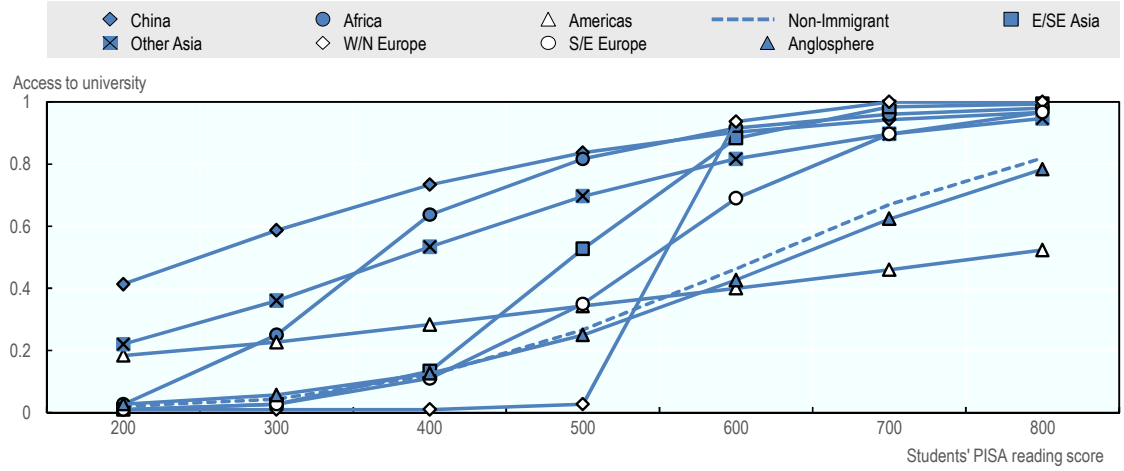


Note: Predictions from a regression model.
Source: Data from Childs, Finnie and Mueller, 2017.

A conceptually similar plot is presented in Figure 7.6, although this looks at the PISA reading score at age 15. The children of immigrants in many ethnic groups have high probabilities of attending university despite relatively low test scores.

Although Figures 7.3-7.6 are descriptive, cultural or ethnic determinants of access appear to be indeed large; perhaps that has to do with the ethnic human capital discussed by Borjas (1992), Postepska (2017), and Finnie, Mueller and Sweetman (2016). The traditional factors depicted in these figures do not appear to be nearly as important for these "new" children of immigrants as they are for the children of the native born. Moreover, the relevant educational aspirations appear to be in place at a very young age. Aydemir, Chen, and Corak (2013) point out the much weaker relationship between parents' and child's education for immigrants in Canada compared to non-immigrants. Focusing on ethnic group averages, Luthra and Soehl (2015) make a similar observation for the children of the "new" immigration in the United States. Of course, the relative sizes of ethnic groups vary dramatically across the two countries. Baum and Flores (2011) agree but also point to important source country groups with low average levels of post-secondary access, and suggest that it is necessary to understand specific differences between ethnic groups. Feliciano and Lanuza (2017) survey ethnic group level differences in educational attainment among the children of immigrants in the United States.

Figure 7.6. Children of immigrants' probability of university access by parental source region and students' reading score



Note: Predictions from a regression model.
Source: Data from Childs, Finnie and Mueller, 2017.

On a different note, the relationship between the educational attainment of immigrating children and the native-born children of immigrants, as a function of their parents' immigration classification, is studied by Hou and Bonikowski (2016). The authors observe substantial differences in educational outcomes of the children of immigrants across immigrant entry categories. Children whose parents are in the skilled worker (points system) and business categories had university completion rates that were about two and a half times higher than those of individuals whose parents entered in the family class. Refugees were somewhere in between, but closer to the family class. Consistent with the broad finding by, for example, Bleakley and Chin (2004, 2008, 2010, for the United States) and Schaafsma and Sweetman (2001, for Canada) who observe that parental influences matter less for children who arrived very young. Hou and Bonikowska observe that the parents' admission class matters less for those who arrive in Canada at preschool age. Controlling for parents' characteristics as observed at arrival reduces the gaps by less than 50% for the family class, and by as much as two-thirds for refugees. Focusing on immigrating children, Evans and Fitzgerald (2017) find that child immigrants who enter the United States before age 14 have similar educational outcomes as the children of the native born, whereas those who enter at a later age have poorer outcomes that are largely attributable to language skills.

Labour market outcomes

Understanding the data used to study the intergenerational economic integration of immigrants into host countries is crucial for interpretation. Much research in the United States and Canada looking at labour market outcomes among immigrants focuses on annual employment earnings, probably because many studies rely on census data where this outcome is reported. However, some studies use data sources that contain hourly wages. The difference is significant since immigrants tend to work longer hours than do the native-born. Also, many studies restrict the sample for analysis to the (full-time) employed, which misses differential employment levels. Poverty is sometimes chosen as an alternative outcome measure.

Broadly speaking, in both countries the labour force participation rates and the unemployment rates of immigrants who arrived as children, and both the children of immigrants and the native born, are comparable (Picot and Hou 2011b). However, as pointed out by Borjas (2017), adult immigrants (especially those undocumented) in the US are distinct in having higher labour force participation rates and longer working hours. Moreover, immigrants commence working younger and retire later.

In interpreting the earnings of the children of immigrants relative to the children of the native born for both the United States and Canada, it is important to distinguish between unadjusted results (or results conditional only on age) and those that are conditional on an array of observed characteristics. Unconditionally, in both countries the children of immigrants of both genders have earnings that are equal to or greater than those of the children of non-immigrants (Card, DiNardo and Estes, 2000; Picot and Hou, 2011b; Aydemir and Sweetman, 2008). In the United States the earnings of children of immigrants are close to the same as those of the children of the native born (if one compares individuals of the same age there is effectively no gap). In Canada the children of immigrants have an earnings advantage on the order of 10-15% (those with two immigrant parents tend to be on the higher side of the range), and are also more likely to be employed in professional occupations, than the children of the native born. Immigrating children in Canada have an earnings advantage, close to 20%, relative to the children of the native born; however, in the United States they have a 20% disadvantage for males and no gap for females (Aydemir and Sweetman, 2008) – broadly consistent with the education outcomes seen in Tables 7.5-7.7.

When regression controls (especially education, ethnicity and urban/rural residency) are taken into consideration (Aydemir and Sweetman, 2008; Picot and Hou, 2011b), the coefficients for the children of immigrants change only modestly for the United States. Unconditionally, the Mexican community has lower average annual or weekly earnings than the children of the native born, but conditional on observed characteristics – in particular education – it has higher, not lower, earnings. In part this is attributable to higher hours of work. In Canada, the story is very different. The substantial earnings premiums of immigrating children and the children of immigrants, found without controlling for observed characteristics, are not only reduced but the gaps also shift from positive to negative. Unconditionally, immigrating children and the children of immigrants have a substantial advantage, but – conditional on (especially) their higher level of education and urban residency – those premiums become deficits. Immigrating children and the children of immigrants are, on average, more highly educated and much more likely to live in a small number of large urban locations, both of which characteristics are associated with appreciable earnings premiums. Picot and Hou (2011b) point out that much of the negative gap is concentrated among the visible minority, and particularly the black, community of immigrating children and the children of immigrants. Also, as seen in Figure 7.5 and Figure 7.6, the children of immigrants are more likely to access higher levels of education with lower levels of high school marks and test scores.

Taking a longer-term perspective using US data from 1940 to 1996, Card, DiNardo, and Estes (2000) observe that despite the substantial shift in source countries associated with the policy reforms of the 1960s, the rate of intergenerational integration in earnings has changed little. They find that the children of immigrants, on average, continue to have earnings that close 50-60% of the gap experienced by their fathers' ethnic group. In Canada, there is only a weak relationship between the earnings of immigrants and those of their children (Aydemir, Chen, and Corak, 2009), with a higher percentage of the gap closing.

One interesting Canadian study by Skuterud (2010) attempts to sort out immigration status from ethnicity, since there are debates about whether the immigrant earnings gaps at arrival that have opened since the 1970s are primarily the result of ethnic discrimination. Consistent with earlier work by Schaafsma and Sweetman (2001) looking at only immigrants arriving during childhood, Skuterud observes that most of the immigrant intergenerational improvement in earnings occurs for the visible minority community and not for the white one. The largest decrease in the size of the gap occurs between adult immigrants and immigrant children or the children of immigrants. That is, intergenerational earnings growth is primarily a visible minority phenomenon in Canada. However, the gap does not entirely close. Even for the children of native born visible minority workers, there remains an earnings gap compared to the children of native born non-visible minority workers, albeit small compared to that observed for immigrants.

A much smaller branch of literature but one with tremendous potential for future research focuses on employer and/or workplace effects. It is motivated by research such as that by Corak and Piraino (2011), which finds substantial commonality in employers of fathers and sons (independent of immigration status). Although focusing on immigrants, Aydemir and Skuterud (2008) use matched employer-employee data and observe that male immigrants are non-randomly sorted across employers within cities and geographic regions. Further, earnings differences across employers substantially dominate those within employers in explaining the immigrant earnings deficit. In contrast, for female immigrants, within-establishment wage differentials appear to play a larger role. It is unclear to what extent this employer effect matters for the children of immigrants, but research suggests that the effects on their children are plausible and should be studied in future.

Conclusion

As it concerns an increasingly large segment of society, understanding the intergenerational integration of immigrants into North America's society and economy is becoming more important. The children of immigrants' share of the population and the workforce is projected to increase in both the United States (Taylor et al., 2013) and Canada (Morency, Malenfant, and MacIsaac, 2017). Continually shifting source countries is also an important issue.

The United States and Canada have clearly taken different paths – in part because of ongoing policy decisions, many of which commenced in the 1960s; in part because of geographic location; and in part because of global reputations and political/familial links. The United States has a much higher share of immigrants with low levels of education than does Canada, and this has important ramifications for both immigrating children and the children of immigrants. Interestingly, the children of immigrants in the United States who have parents with low levels of education seem to have outcomes comparable to American children of the native born with similarly educated parents. In contrast, in Canada the children of immigrants who have parents with low levels of education acquire education in excess of that for children of the native born who also have parents with low levels of education. The story of immigrants' children in Canada is not only about the children of highly educated parents obtaining substantial education, but also about the children of immigrants with low levels of education obtaining substantial education.

Looking at the children of immigrants by immigration class shows that the children of refugees have better outcomes than those of family class immigrants, and both have poorer outcomes than the children of economic immigrants. However, the younger a child arrives in Canada, the less important are the immigration classes for predicting educational outcomes.

In the United States, on average, the children of immigrants have earnings that are indistinguishable from those of the children of the native born, and conditioning on the standard set of variables employed in these types of analyses (age, education, location and ethnicity) does not substantially alter that conclusion. Of particular note in the United States is the large Hispanic, especially Mexican, community of immigrants and their children. These immigrants have low average levels of education, and earnings that are relatively good conditional on that education but low unconditionally. There is a substantial increase in education and earnings for the children of Mexican immigrants relative to that of their parents; educational attainment increases to close to the end of high school. Progress beyond this point is slower. Several rationales have been investigated including the magnitude of the Hispanic community, which is argued to make English comprehension less valuable in the short run and so prevent economic progress in the longer. Another key rationale is a classic liquidity trap whereby individuals cannot invest in education because they need to support their families. Experiments, such as providing access to advanced study classrooms to gifted and high-achieving minority students, are being attempted in certain locations to address this issue.

In Canada the story is quite different since immigrating children and the children of immigrants have an earnings premium unconditionally. This premium is "explained", and even reversed, once observed characteristics, especially education and geographic location, are taken into account.

Much work remains to be done in both countries to gain a better understanding of the intergenerational integration of immigrants. More work such as that by Card and Giuliano (2016) looking at efforts to assist disadvantaged students, many of whom immigrated as children or are the children of immigrants, can help to plot a course forward. Also, increased research looking at the role of firms in the intergenerational integration of immigrants may provide insights to assist in accelerating the integration process.

Note

1. "Immigrants" here refers to adults who migrate to a receiving country with the intention of residing there indefinitely/long term. Caveat: Definitions of "adult" vary, with age-at-arrival minimums from 12 to 25 being common. Researchers not focusing on intergenerational issues – and some who do – do not always establish an age-at-arrival restriction. The entire permanent population is, unless otherwise indicated, divided into four mutually exclusive and exhaustive groups: (adult) immigrants, child immigrants, native born children of at least one immigrant parent (i.e., children of immigrants), and children with two native born parents (i.e., children of non-immigrants). The last category is commonly used as a comparison group. Note that despite the "child" concept, many analyses focus on adults and the classification is not a function of current age. So, for example, a child immigrant may have arrived at age 7 but be age 43 at the time of a survey.

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